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BACTERIOLOGY - R
316 BRADY LABORATORY

EXPLANATION OF THE PLATE.

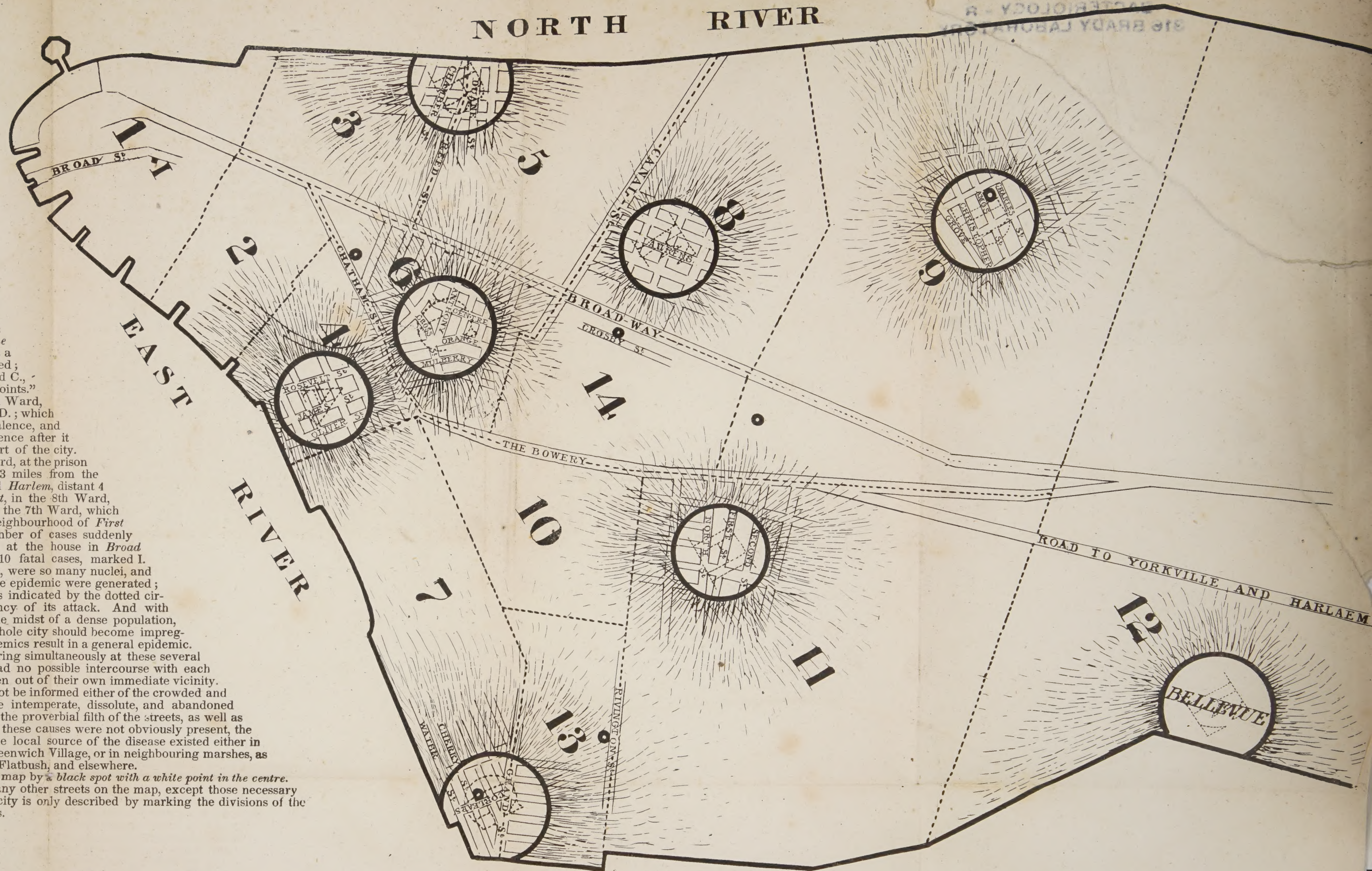
The annexed plan of the city has been sketched for the purpose of enabling strangers to perceive the evidences of *non-contagion*, as well as of *local origin*, furnished by the prevalence of the epidemic Cholera in New York, in the summer of 1832:—

The heavy black circular lines designate the different parts of the city where the disease suddenly appeared, and in some of them simultaneously. The first cases are reported to have occurred in *Cherry street*, and *Roosevelt street*, within the circle in the 4th Ward, designated on the map by the letter A. But the disease appeared almost simultaneously, and with much greater virulence, in the 3d Ward, in *Reed*, *Washington*, and *Duane streets*, at the point marked B., which is at least a mile in a straight line from the point first named; and also in the 6th Ward at the circle marked C., which includes the location called "The Five Points." Within a few days after it appeared in the 9th Ward, at *Greenwich Village*, within the circle marked D.; which is nearly 2 miles from the seats of its first prevalence, and where the epidemic raged with unwonted violence after it had nearly subsided in almost every other part of the city. Very soon afterward it broke out in the 12th Ward, at the prison and hospital at *Bellevue*, marked E., nearly 3 miles from the place of its commencement;—at *Yorkville* and *Harlem*, distant 4 and 8 miles from the city;—at *Laurens street*, in the 8th Ward, marked F. on the map;—at *Corlaer's Hook*, in the 7th Ward, which is designated G.;—in the 11th Ward, in the neighbourhood of *First street*, east of the Bowery, where a great number of cases suddenly appeared within the circle marked H.; and at the house in *Broad street*, in the 1st Ward, where there were 10 fatal cases, marked I.

These several points marked by black circles, were so many nuclei, and perhaps include all such, where the causes of the epidemic were generated; and whence the disease spread itself abroad, as indicated by the dotted circles, diminishing in its force and the frequency of its attack. And with these several sources of the morbid cause in the midst of a dense population, it is not surprising that the atmosphere of the whole city should become impregnated with the morbid influence, and these endemics result in a general epidemic.

It cannot be denied, that many cases occurring simultaneously at these several locations, were in persons who could have had no possible intercourse with each other; and many of them had not recently been out of their own immediate vicinity. Those who are acquainted with the city, need not be informed either of the crowded and filthy state of several of these points, or of the intemperate, dissolute, and abandoned habits of the inhabitants of some of them, or of the proverbial filth of the streets, as well as the houses, in most of these locations. Where these causes were not obviously present, the district is known to be *made ground*; or some local source of the disease existed either in a large filthy stable, as at *Christopher street*, *Greenwich Village*, or in neighbouring marshes, as at *Bellevue*, *Harlem*, *Yorkville*, *Williamsburg*, *Flatbush*, and elsewhere.

The *Cholera Hospitals* are designated on the map by a black spot with a white point in the centre. It has been thought unnecessary to lay down any other streets on the map, except those necessary for the object in view. Hence the rest of the city is only described by marking the divisions of the several wards, and the prominent thoroughfares.



Wm A Brewer

A

PLAIN AND PRACTICAL TREATISE

ON THE

EPIDEMIC CHOLERA,

AS IT PREVAILED IN THE CITY OF NEW YORK,

IN THE SUMMER OF 1832;

INCLUDING ITS NATURE, CAUSES, TREATMENT AND PREVENTION.

DESIGNED FOR POPULAR INSTRUCTION.

TO WHICH IS ADDED, BY WAY OF APPENDIX,

A BRIEF ESSAY ON THE

MEDICAL USE OF ARDENT SPIRITS;

BEING

AN ATTEMPT TO SHOW THAT ALCOHOL IS AS UNNECESSARY
AND MISCHIEVOUS IN SICKNESS AS IN HEALTH.

BY DAVID MEREDITH REESE, M. D.

New York;

CONNER & COOKE, FRANKLIN BUILDINGS;

J. & J. Harper; McElrath, Bangs, & Herbert; and Collins & Hannay—*Boston*: Lilly, Wait, & Co.—*Albany*: O. Steel—*Rochester*: Hoyt, Porter, & Co.—*Ithaca*: Mack & Andrus—*Utica*: William Williams—*Buffalo*: R. W. Hoskins—*Poughkeepsie*: P. Potter—*Philadelphia*: E. C. Mielke—*Baltimore*: William & Jos. Neale—*Washington City*: Thompson & Homans—*Richmond*: Robt. J. Smith—*Nashville*: J. P. Ayers, & Co.—*Mobile*: J. S. Kellogg—*Tuscoloosa*: Pfister & Co.

1833.

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ENTERED ACCORDING TO THE ACT OF CONGRESS, 1833,
BY DAVID MEREDITH REESE,
IN THE OFFICE OF THE CLERK OF THE SOUTHERN DISTRICT OF NEW YORK.

PREFACE.

THE following plain and practical observations on Cholera, have been prepared at the suggestion of many distinguished members of the profession, and others, who have communicated to the author their impression that a brief and perspicuous work, adapted to popular instruction, on the important subject of the late epidemic, might be extensively useful to our citizens. The great ignorance of the unprofessional portion of our population on the subject, was obviously the prolific source of much imprudence, and threw the timid into a consternation and terror which prevented the adoption of any uniform and rational mode of prevention; while, at the same time, the vague as well as contradictory opinions which have found their way into the public press, upon the subject of the causes, prevention, and cure of Cholera, have been very far from inspiring confidence in the members of our profession; and in such perilous times, this confidence was more than ever necessary and important.

With the design, then, of enlightening the uninformed upon a subject of vast interest to the public health, and with the view of attempting the removal of those terrors which overspread the

American community on the first visitation of this epidemic, during the last year, the following pages have been prepared, amid the busy avocations of professional duty, which afford the author but brief intervals of time, and these subject to much interruption. Under such circumstances, many imperfections of style and arrangement may be apparent. But for the facts he has recorded, for the opinions he has expressed, and for the practice he recommends, he confidently relies upon the future for their ample confirmation, especially if, as is feared by many we should be soon visited by a recurrence of the epidemic, which may Heaven avert.

The scenes of July, August, and September, 1832, are ever present in his memory, and for the fervency and zeal with which he urges his protest against the preventive and remedial powers of Ardent Spirits, he will need no apology with those who witnessed the rage of the pestilence in New York, and passed through the arduous labours and perils of that evil day, when disease and death, in their most appalling forms, stalked through our city. With others who, impelled by the desire of avoiding the unprofitable labours which such calamities impose on our profession, deserted their posts in time of danger, or sought refuge from their personal fears by inglorious flight, he may require some apology for the confidence with which he expresses his censures upon practice of which they have heard much but seen nothing. But to his professional brethren, in this city and elsewhere, who continued to perform their duty in "wrestling with death," most frequently without pecuniary reward, and al-

ways without any adequate remuneration for labours so arduous and perilous; to them he appeals in confirmation of the widespread and fatal mischiefs which the continued sale and use of spirituous liquors occasioned in the causation of Cholera, both in its attacks and in its fatal results. And whatever may have been their views at the commencement of the epidemic, there are many whose eyes were opened by the startling and horrible facts which were daily presented to their observation, and who had the magnanimity to unite in the testimony against it, which some of us felt it a sacred duty to bear, *ab origine*, amidst a torrent of prejudice, malevolence, and reproach.

It is, however, fortunate for the public, that the connexion between Rum and Cholera became so apparent in the course of the disease in this city and elsewhere, that it needs not the testimony of the faculty in any place to declare and maintain it. And the impulse given to the temperance reformation by the fearful catalogue of facts developed during the existence of Cholera among us, is not among the least of the ways in which the God of Providence has brought "good out of evil." And although we have been called to mourn the loss of a number of estimable and virtuous citizens, who fell by the destroyer in many places, yet if our community will only profit by the lesson which has been so painfully taught us the past year; and if our civil and municipal authorities will now take warning, and interpose their jurisdiction for the protection of health and life, by aiding the great work of banishing *the traffic and use of ardent spirits* from our country; such a consummation would be cheaply purchased, if the

sacrifice of tenfold more excellent citizens than have fallen had been necessary to achieve it. And there are many among the benevolent and philanthropic of the land who have such views of the importance of this result, that, to accomplish it, they would cheerfully have consented to be themselves the victims.

That the following pages may aid in producing this result, and that, in the event of a re-visitation of the epidemic to any portion of our land, they may diminish the mischiefs and fatality of the Cholera, is the humble hope and ardent wish of

THE AUTHOR.

May 20th, 1833.

TREATISE

ON

EPIDEMIC CHOLERA.

I. *The Nature of the Disease.*

The science of medicine is not more defective in any other peculiarity than in its nomenclature. Morbid agents, diseases, and even remedies, are often distinguished by *names* which are not only ambiguous and unintelligible, but which convey erroneous ideas of the nature of the subjects to which these names are applied.

This is eminently true of the disease under consideration; for the term "Cholera," which is generically applied to it, is calculated to give a false view of the whole subject. The true meaning of this word, Cholera, is "an undue flow of bile," being derived, according to Celsus, from $\chiολη$ and $\rho\acute{\epsilon}\omega$, literally *bile-flux*; while one of the most distinctive peculiarities of the disease to which this name is applied, is a suppression both of the secretion and excretion of bile. This term is, therefore, a misnomer; and yet it has been so long associated with the disease in question, that it would be, perhaps, impossible to effect its abandonment; especially while the most of the other specific epithets adopted or proposed in lieu of it are

open to equally valid objections. It may be necessary to retain the name, therefore, notwithstanding its philological inaccuracy and inappropriateness.

But, although it is essentially different in its nature from the Cholera Morbus of our country, and not an aggravated form, as has been erroneously supposed, yet it is not a new disease to the world, or to the country either; and this fact, where it is understood and believed, removes much of its frightful character. The consternation among the community, and the blunders of the faculty, as well as the ill success that has proverbially attended its treatment, may be chiefly traced to the mistake of supposing it to be a new disease. This leads patients to distrust their medical advisers, and resort to nostrums; and, on the other hand, leads physicians to prescribe for the Cholera some one of the varied and opposite remedies with which the book market has been indiscriminately deluged. If physicians would treat this disease according to the symptoms, and seem not to know what to call it, instead of prescribing for the *name* of this strange destroyer, we should soon find, among the enlightened and scientific, a uniform and successful system of practice.

Instead, however, of prescribing for the symptoms, as they present themselves in every individual case, and proportioning the remedies to the violence of the attack, it is to a lamentable extent the fact, that some physicians were filled with perturbation at witnessing the first symptoms of the epidemic. Dreading the very name of Cholera, to which they had been taught to attach the idea of sudden and certain fatality,

they prescribed as though they were doubtful whether their remedy would kill or cure the patient, and used some one of the varied and contradictory remedies which have been successively eulogized by foreign practitioners. Hence, as *calomel*, *opium*, *brandy*, *bleeding*, *cold* and *heat*, have each found advocates in other countries, by bold experimentalists, there were those who, unwilling to trust to either singly, in contending with this new enemy, would rapidly, and even simultaneously, adopt the whole. If they began by bleeding with one hand, they would give brandy with the other. If they gave calomel for its purgative quality, they would give opium for fear of accidents. If they used cold, whether internally or externally, they would counteract it by heat. And thus, if patients did not get well, they knew not whether they died of the disease or the remedies, for either would singly have proved fatal; and if they recovered, in spite of the treatment, then each and all of these contradictory remedies were lauded to the skies. In the commencement of the epidemic, in very many instances, it was found that the patient had been subjected to all these agents before the case had terminated; and there is reason to believe, that many were subjected to the most of them, before it was discovered that they had not suffered from the disease, but only from the dread of it; and such cases were significantly called Cholera-phobia.

Beside this palpable objection to the name of the disease, the ambiguity of the whole subject is increased by the loose definitions which have been given of it by transatlantic as well as American writers.

Scarcely any two of them can be found who agree in their definition, or in their account of the prominent and diagnostic symptoms; while the attempt to divide the disease into Cholera and Cholerine, and also into different stages, as they would the paroxysms of an intermittent, is for the most part visionary and absurd. Indeed, it is difficult to give an abstract definition, with any tolerable accuracy, of a disease so variable in its features, so rapid in its progress, and so sudden as it often is in its onset and in its result. Hence, the attempts to generalize the subject, by defining its nature in a few words, have been unsuccessful; and they have been so, because there are so many striking and characteristic symptoms, that they cannot readily be compressed into the brevity desirable in a definition.

Dr. John Mason Good defines it thus, viz.: "The dejections watery; ineffectual retchings, or vomitings of a whitish fluid; spasms successive and violent, often extending to every organ; great despondency and prostration of strength." It is evident, however, that this writer never saw the disease, or he would not have thus stopped short of the most striking features of its severest forms, and he would have added the following: "pain at the pit of the stomach; giddiness; urgent thirst; suspension, nearly complete, of the action of the heart and arteries, with its necessary consequence, failure of secretion and of animal heat, as exhibited in asphyxia; cold surface, cold tongue and breath, and suppression of the urinary and biliary discharges." But, beside all these, there are other symptoms of a characteristic nature,

in the most formidable cases, viz.: "the whispering voice; the blueness and wrinkled integuments of the extremities; the doughy feel of the abdomen and muscular structure; the livid shrunk countenance, with the glazed and sunken eye, so expressive of anxiety and suffering, and which add, in so remarkable a manner, to the apparent age of the patient; together with the extraordinary sweat which literally streams from every pore of the body." These are circumstances which, if once witnessed, impress the memory too forcibly to be forgotten, and cannot fail to be immediately recognized when exhibited in succeeding cases; and the same may be said of the discharges from the stomach and intestines, which have received the appropriate appellation of *congee*, or rice-water, and may properly be considered as peculiar to this disease.

Such are the numerous and appalling symptoms which attend this formidable disease; and in its intensest form, it is surprising with what accuracy they may all be observed, not one of them being absent. And yet in the worst cases, with all this concatenation of alarming features, while the circulation is so nearly at a stand that no pulsation can be felt in any vessel of the body, the sensorial powers remain unaffected, nearly, if not entirely, to the last. The patient is sensible, and answers with distinctness any question put to him, though it may be in monosyllables only; while an indescribable calmness and composure of mind is strikingly evident. He also occasionally retains his muscular strength; so that he will sit up in the bed, or even walk, if permitted, to

do so, while the respiration goes on with ease and regularity till within a few minutes of death.

This catalogue of symptoms is, however, rather applicable to a stage of the disease, than to its entire course; yet this stage, as it is called, is not only the most striking and characteristic, but often, especially in the beginning of the epidemic, may be the only one which exhibits itself to our notice. So sudden is the invasion, in some instances, that the patients compare it to a blow of a club; and according to Dr. Smith this comparison was frequently made in Paris by the patients, who described it as a "*coup de baton.*" It is true, that in a large majority of cases, the train of formidable symptoms we have described, however suddenly they may have been successively developed, are preceded by what are called "premonitory symptoms." These are, "a sense of coldness on the surface of the body, accompanied with languor, but not amounting to a chill; impaired appetite and digestion; a diarrhœa of some hours or days in duration; a slight headache, with a noise or ringing in the ears; and not unfrequently some pain at the pit of the stomach or in the abdomen, with a sense of tightness in breathing, which gives an inclination to sigh. Vomiting occurs simultaneously in some instances, especially if any ingesta has been recently taken into the stomach, or if that organ has been previously impaired by dyspepsia or otherwise. A slight cramp is often felt in the soles of the feet, the calves of the legs, and sometimes in the other extremities." And when these several signs have been present a few hours, if relief be not obtained, the second stage, or

paroxysm, to which the term Cholera Asphyxia is generally applied, will soon supervene. The symptoms of this appalling condition have already been named in our attempt at its definition in the preceding pages. Sometimes they present themselves successively, and are several hours before the whole are developed; but in a majority of instances this formidable array of terrifying symptoms appear almost simultaneously. Such is the extraordinary change in the countenance of the patient in some cases after lying in this state but a single hour, so astonishing is the alteration of the features and the colour of the skin, that he would hardly be known by his intimate friends; and the entire change in his voice, which is almost universal, defies recognition. But still the patient suffers little or no pain, and ordinarily preserves a calm and collected state of the mind, betraying no apprehension or alarm, amid the utter wreck of the powers of life, so visible to every beholder. And now if prompt and energetic remedies be not diligently employed, the case will terminate fatally in from four to twenty hours.

In the event of the successful efforts of art, in carrying the patient through this state of asphyxia, collapse or blue stage as it has been called, a new train of symptoms exhibit themselves, which has been designated by the name of the third stage of Cholera, though in fact it is the reaction necessary to convalescence. Still, however, it calls for judicious and diligent management, that it may be aided when too languid, or moderated if too violent, and the latter is most frequently the case; for the vascular reaction is

ordinarily proportionate to the intensity of the preceding train of phenomena, as might be anticipated from analogy. Hence, for the protection of the vital organs, very active depletion is often required. This reaction, if it be protracted, as is frequently the case, has received the name of "consecutive fever," and invariably bears the marks of congestive or typhus fever so plainly, that if it were not unfortunately regarded as a sequel of Cholera, and therefore deemed to be of specific character, would uniformly be recognised and treated accordingly. It is painful to recollect how many instances occurred in this city, in which persons were safely brought through the paroxysm of asphyxia, and yet afterwards fell victims to consecutive fever, and this too after they were reported as convalescent and even cured; and after they had been trumpeted as the trophies of some one or other of the numerous specifics, each of which had its advocates, however mischievous or even inert.

I have thus given the views of the different writers who concur in tracing three distinct stages in the Cholera, viz.: 1. The stage of irritation; 2. The stage of collapse; and, 3. The stage of reaction.

In reference to this part of the subject, I remark, that the first, or *irritative* stage, as it is called, is not entitled to this conventional appellation, Cholera: 1st. Because it has no certain diagnostics by which it may be distinguished with certainty from intestinal or vascular irritation, arising from other causes; 2d. Because many cases of Cholera, in its worst form, occur in every place in which this stage, in its sensible signs, has been wholly absent; and, 3dly,

because I believe the “premonitory symptoms” constituting this stage are in their nature prophylactic, or preventive. The “*diarrhœa*,” for which there are ten thousand empirical specifics, which stupidity, and what is worse, cupidity, has invented in the form of stimulants, astringents, and narcotics, is, in its true character, none else than the result of the efforts of nature for her own protection. It is an effort of the *vis medicatrix naturæ*, to overcome the morbid action, and restore the balance of the circulation; and which, instead of being treated as the first stage of Cholera, and suppressed at its commencement, as is too often mischievously done, should invariably indicate the appropriate treatment by mild and gentle purgatives. And so of the vomiting, which often takes place simultaneously with this diarrhœa, and hence very many judicious physicians have employed *salt and water*, or some other safe emetico-cathartic, in these early symptoms, and with signal success.

It is in the collapse or second stage only, that the disease, to which the conventional appellative Cholera can be properly applied, is to be certainly recognised; or with which its characteristic symptoms can be distinguished. The term “spasmodic” cannot be justly used, in contradistinction to the ordinary Cholera Morbus of our climate, until arrested secretions and an obstructed circulation develop the collapsed state of the surface, and asphyxia, partial or complete, is present, for the obvious reason, that the spasms are more frequent and severe in common Cholera Morbus, than they often are in the worst cases of the epidemic; and indeed many fatal instan-

ces have occurred in which there was little or no external spasm during their whole course. And the spasmodic contraction of the muscles of the extremities, which are described as characteristic of the first or premonitory stage, are not greater than frequently exist in other internal diseases. When the incipient collapse or second stage, with approaching asphyxia, exhibit their appalling features, it is then that the peculiar spasms, characteristic of epidemic Cholera, become so severe and terrifying, if they appear at all in the case; and hence some writers have defined this incipient collapse as a distinct stage, which they call the spasmodic stage. These spasms are, however, but a link in the chain of symptoms of the disease, and properly belong to the stage of collapse.

The third stage as it has been called, or that of reaction, cannot properly be dignified by the title of a distinct stage of Cholera, because it has no characteristic or diagnostic feature, by which it can be distinguished from other instances of morbid reaction; and the local affections attendant upon it, are altogether contingent upon the previous condition of individual organs, and vary indefinitely. There is, therefore, much greater propriety in the opinion of Dr. Payne of this city, in his excellent letters to Dr. Warren of Boston, in which he regards Cholera as a fever, of which the *collapse* is the first stage, and *reaction* the second. Still, however, the division of this formidable malady into stages is one purely arbitrary, and for the most part serves no valuable practical purpose.

The same may be said of the "consecutive fever,"

of which so much has been heard, as one of the sequela of Cholera. The instances of recovery from the blue stage, or collapse, are often reported a few days after to have died of consecutive fever, by which a Typhus or Congestive fever is meant; and this is ordinarily the effect of the stimulating, or brandy practice; for if the patient live through the period of collapse, by reason of a constitution sufficiently vigorous to sustain the combined influence of the three poisons, brandy, opium, and Cholera, it is no marvel that local congestions should exist which prove fatal during this "consecutive fever," which is consecutive, not upon Cholera, but in most instances consecutive upon the treatment, or the indiscreet management of convalescence. Those physicians who have treated the disease by depletion throughout, it is every where known, have had little trouble from any consecutive mischiefs; and convalescence has been speedy, as well as permanent.

In conclusion, therefore, I also will show my opinion. I conceive the essence of Cholera to consist of a retirement of the circulating mass of the blood from the external surface of the body, and its consequent accumulation in the larger and internal vessels. This is the first symptom in all cases, whether with or without observation, and indeed is the only diagnostic which is uniform and infallible in the early period of the disease. Indeed, a coldness of the skin is often complained of either before or at the commencement of the diarrhœa, regarded as the first stage of the disease, and arises from the absence of the blood from the capillary vessels. This loss of

balance between the external and internal circulation soon results in an inverted excitement, during which the insensible perspiration from the skin ceases, and in bad cases the exhalations from the lungs are partially or altogether suppressed; and hence the voice is so strangely altered, even before asphyxia has supervened. In many instances nature is successful in expelling the morbid impression by the diarrhœa, especially if vomiting be superinduced early in its course, either spontaneously, or by the salt and water or mustard emetic, as was frequently and judiciously exhibited.

The prostration of the nervous system, by the epidemic influence, is not only found to accompany the premonitory diarrhœa, but is sensibly felt by those who, by judicious means of prevention, avoid the exciting causes, and entirely escape the disease. A sense of exhaustion, however, if it be accompanied by a coldness of the skin, and intestinal evacuations of a watery character which are large and frequent, will, unless speedily relieved, develop the alarming characteristics of Cholera.

Thus, it will be perceived, that I regard the general and almost universal morbid sensations, complained of during the prevalence of Cholera, as only giving evidence of liability to an attack, by the operation of the remote cause having excited a predisposition, or epidemic constitution, as it is sometimes called. And more or less of the signs of this predisposition were found to exist in the whole community wherever the epidemic has prevailed. It was known by a disturbance of the digestive organs, a sense of

heat, fulness, and uneasiness or pain in the abdomen, a furred tongue, a sense of general debility with occasional cramps of the muscles, especially at night. And thousands in New-York, and elsewhere, felt these evidences of predisposition, and yet altogether protected themselves from an attack by prudence and discretion in their habits of living, and were not even afflicted with a single "premonitory symptom."

In like manner, the diarrhœa and other premonitory symptoms, as they are called, are all to be understood as only giving evidence that some one or more of the exciting causes has been applied, and that, under the epidemic constitution or predisposition, the disease itself is about to be developed, unless the indications of nature be followed, and the morbid agency controlled. Still, however, the patient cannot be said to have Cholera, nor will he yet suffer from an attack, if judicious means be used. Hence it has been truly affirmed, that in this stage the epidemic need never be fatal, and accordingly preventive treatment is urged upon all who suffer from premonitory symptoms as indispensable. I insist, however, that the thousands who have been cured of these symptoms, have not suffered an attack of Cholera.

I apply the term, therefore, only to that train of phenomena which present themselves subsequently, if the premonitory diarrhœa be present, which is by no means universal. For in many cases, particularly during the rise and at the climax of the epidemic, the attack has been sudden, and even instantaneous, and the patient is "seized with the Cholera," or in

the language of many of the patients in Paris, who represent themselves as struck with a blow ;— “frappé comme d'un coup de baton.” In India, by the testimony of Dr. Johnson, there were no premonitory symptoms.

Most generally however, it must be confessed, that, in this country, the onset of the disease has been preceded by diarrhœa of some hours, and frequently of some days duration. In all cases in which this premonitory diarrhœa ceases spontaneously, is checked by art, or is inadequate to the expulsion of the disease, which is often the fact in bad cases, an attack of Cholera, properly so called, will supervene. The patient will now have pain in the bowels and in the chest, vomiting, with coldness of the skin, tongue, and breath, increasing prostration of strength, spasms in the limbs, and often in the abdomen and thorax, and the pulse will be found to be laboured, and indicate that state of the circulation known among physicians as one of suffocated excitement. If these symptoms be not promptly relieved by art, the patient will very soon fall into a state of *collapse*, as it is vaguely called, evinced by asphyxia, or a total loss of pulse at the wrist, impeded or obstructed breathing, an increase in the character and extent of the spasms, a profuse, morbid perspiration, over the whole body, with a thirst that is intolerable, a total suppression of the urinary and other secretions, and an alarming increase in the vomiting or purging, or both.

These are the true characteristic symptoms of Cholera, and without the most of these the patient

cannot be said to have the disease, whatever signs of predisposition, or premonitory symptoms, he may have presented. When most, or all, of these alarming features have subsisted over three or four hours, the case will often defeat the best directed efforts. If, however, they have just appeared, or have existed but for an hour or two, they are not so formidable as has often been represented. Into this state, justly denominated the *incipient collapse*, most of the cases had fallen in the early progress of the epidemic, before physicians were called, and the treatment of such symptoms was therefore the first lesson we had to learn.

The reaction and consecutive fever, of which so much has been said, I have already affirmed to have no peculiarity by which they can be distinguished from these morbid phenomena when they are the sequela of other congestive diseases; and their obstinacy and danger is ordinarily the result of previous neglect or mismanagement. Experience has amply demonstrated that even after convalescence commences, by a single act of imprudence or excess in eating, and especially if any irritating medicine be given as a purgative or otherwise, the most disastrous results will follow. Several instances occurred within my knowledge, in cases which had decidedly convalesced, that by taking a single glass of wine, or brandy to strengthen them; or a simple dose of rhubarb or castor oil, injudiciously prescribed by some officious neighbour, a consecutive fever was ushered in which resisted every remedy, and terminated fatally in a few days. In some few cases, the same

result was observed to follow by indulging that morbid hunger which attends convalescence, by a single meal. These and similar facts show the importance of the greatest possible caution, in those who have passed safely through the severe form of the disease, and that during their recovery their food should be of the simplest kind, and but sparingly taken; and above all, that they should take no kind of stimulating drink or irritating medicine.

Relapses were seldom if ever observed to occur; but mismanagement, soon after recovery, was followed by this fever of which we have been speaking. Numerous instances of a second attack of Cholera were witnessed, some of which were fatal; but such second attack was invariably the result of gross imprudence or excess, and generally in the use of ardent spirits.

II. *Causes of the Disease.*

THE subject of cause and causation has long been deemed the terra incognita of medical philosophy, by reason of the various hypotheses with which the profession has been wont to employ themselves and amuse the public. It cannot be denied, however, that the genius, industry, and learning of almost every age, have been vigilant in investigating the causes of epidemic diseases, and the result of these labours is seen in the fact, that the periodical visitations of such calamities have been combated on each of their suc-

cessive returns with increasing confidence and increasing success.

The history of these United States has been marked by the occasional visitation of contagious, infectious, epidemical, and endemical diseases, some of which have been aboriginal or indigenous to our soil, and may be regarded as, in some sense, peculiar to the climate; while others have been known in other countries long before they appeared among us, having either been transmitted by contagion, or originated here from the same causes which produced them elsewhere.

It must be conceded, however, that, familiar as we have become with the occurrence, prevalence, and fatality of various epidemics, the appearance of the Cholera, among the events of the past year, has produced an effect upon the public mind far more abiding and universal than that of any former similar calamity ever known among us. Our citizens had heard and read much of this Asiatic scourge, and all we knew of it had impressed us with a sense of its mysterious character, its rapid and erratic course, its unmanageable and incurable nature, and its certain and dreadful fatality. Its fearful devastations in India and elsewhere had filled the mind with horror at the bare recital of its ravages, and the rumor of its appearance on the shores of the St. Lawrence threw our population into consternation, which increased to an alarming degree as the evidences of its existence, and the probability of its extension, became known in the community. This consternation and dread was felt to a greater or less extent by al-

most every individual in the community, and we were called to witness the most appalling effects from this mental horror, which, in some instances, became so intense as to dethrone reason itself, and impel to suicide.

The history of this formidable disease, in the various countries which have been successively the theatres of its ravages, has uniformly furnished the same evidences of its origin, spread, and fatality; and therefore when we become acquainted with its course in any one city or country, we are prepared to understand its nature and causes as fully as we could by the most detailed account of successive visitations in different and distant places. For this reason I shall not dwell in detail upon its history in the various countries where its track has been one of devastation and death; nor shall I trace its progress through our own country, many portions of which have been visited during the last year; but must refer to the works professedly written on this department of the subject. But I propose to myself only a brief summary of the etiology of Cholera, as it prevailed in the city of New York during the months of July, August, and September, 1832, and refer to its history in other places, only by way of illustration.

Among the supposed causes of Cholera, the opinion most general among the unprofessional, and one which receives the sanction of many distinguished physicians in other countries, and of a few such in America, is that it arises from a specific *contagion*, and of course that it is communicated from one place to another by persons or things, as the small pox

and other contagious fevers are propagated. The obvious and irreconcilable difficulties in the way of this doctrine, exhibited with uniformity in every place where it has prevailed, have, however, compelled its advocates to invent a modification of their theory, and hence they have adopted the terms "*contingent contagion*," as expressive of the opinion that it is contagious *only under some peculiar atmospheric circumstances*. This theory, however, only involves the subject in still greater obscurity. For, if the disease be strictly a contagious fever, it can originate from no other cause than *contagion*, and hence the term *contingent*, as applied to contagion, in this case is absurd. Even its advocates concur in admitting that it may and often does originate from other causes, and that it afterwards *becomes* contagious by reason of adventitious circumstances, though it is *not* so without them. This is virtually an abandonment of the known laws of contagion, and seems to be the dernier resort of those who have not the magnanimity to abandon their favourite theory, though a multitude of facts have demonstrated its fallacy.

That the Cholera arises from contagion, under *any* circumstances, is only believed in this country by those few physicians who are professed contagionists, and who prove their consistency by applying their doctrine to epidemic dysentery, typhus, puerperal, and yellow fever, as well as Cholera. The facts, however, occurring in the late visitation of this latter epidemic, have caused many of these to renounce their preconceived opinions, and it may be safely affirmed that, among the intelligent and en-

lightened, both in and out of the profession, there exists very little confidence in the contagious nature of Cholera at the present time.

It is evident to the most superficial observer, that we must look elsewhere for the causes of Cholera than to emigration or importation, as the disease has appeared in cities and countries whose *cordon sanitaire* and quarantine regulations have successfully protected them from other contagious diseases for centuries; and it has also originated in individuals, and under circumstances where the supposition of contagion is excluded by absolute impossibility.

The numerous opinions which have been started by Asiatic, European, and American physicians, have been so various and even opposite in their character, that it would only perplex the reader even to name them. The remote predisposing, exciting, and proximate causes, have all been named by different writers, and scarcely two have agreed concerning either, although equally dogmatical. Hence the mystery which has been thrown around the whole subject, the terrors existing in the community, and the signal fatality which has attended the disease. Even among those who have become convinced that it is strictly an epidemic disease, many have imagined that it defies all analogy, and therefore represent it as a "*nova pestis*."

It has been long known that some peculiar state, condition, or modification of the atmosphere, whether with or without other meteorological phenomena referable to the air and the soil, does occasionally result in the prevalence of disease over certain dis-

tricts of country. And it is equally well known that the disease thus superinduced bears a striking resemblance in each individual case, and that these cases often multiply until scarcely a family or individual escapes more or less of its influence. When only a small section of a city or neighbourhood is thus visited, while other adjacent sections are entirely exempt, we attribute it to some local cause capable of affecting only the atmosphere in its immediate vicinity, and we call such diseases *endemical* or *endemics*. But when the whole of a city and parts adjacent, or a larger district of country, is involved in the visitation, we say they are *epidemics*. In what this obnoxious something in the air consists, this blight, poison, or whatever it may be called, is a problem yet unsolved, and for the obvious reason, that its existence is not cognizable by the senses, nor can it be detected by analysis, but is known only by its effects.

All these endemics or epidemics are viewed by the uninformed as contagious or catching, and for no other earthly reason, than because several members of the same family are affected at or near the same time. This was once the fact among the common people when intermittents or agues and fevers first began to prevail; they were deemed catching or contagious; and were such attacks equally fatal with Cholera, they would still excite equal consternation in new settled countries, and cause the like abandonment of relatives and friends.

By the term contagion, however, physicians understand a disease communicable from a sick to a healthy body by contact, and of course transmissible to any

distance by persons or things, such as small pox; for example, which is a contagious fever. Among the distinct characteristics of such fevers, the three following may be considered most prominent :

1st. They arise from no other source than contagion. This is invariable; and hence, if a contagious fever could be once exterminated from the earth, its re-appearance would be impracticable from any known cause.

2d. They attack but once during life, and the subject is ever after free from a return, however much exposed. The exceptions to this rule are so few and far between, that they do not invalidate the general rule, but rather prove it.

3d. They are capable of being communicated by engrafting or inoculation; and this is the case, not only with fevers of this class, but even with local diseases which are contagious, as small pox, cow pox, &c. This, therefore, plainly distinguishes contagious from infectious epidemics, for the latter cannot be inoculated, having been tried with Cholera, Yellow Fever, and many others.

Now, as neither of these constituents of a contagious fever are found to be true of Cholera, there can be no foundation for regarding it as *contagious*.

But the term *infection* is one often confounded with contagion, and for want of the necessary discrimination here, much ambiguity has been created on this subject. A contagious disease may be justly denominated infectious, but a disease strictly *infectious* cannot possibly be contagious. All endemics and epidemics are said to be infectious; by which term we

mean that the district of country suffering under them is infected by the cause whence they originate. For example, a neighbourhood is labouring under the prevalence of ague and fever, and the air is so *infected* with the cause of this malady, that most, if not all, of those who visit it in health, contract the disease. But the diseased person, or any number of such, may be removed into a healthy neighbourhood, and they cannot infect the air, nor can any or all of them propagate the malady to others who have not been within the infected district. This is the case with nearly all our vernal and autumnal epidemics, such as bilious, intermittent, remittent, and malignant fevers. Hence they are no longer viewed as contagious, and quarantine regulations to prevent their introduction are now nearly exploded in every enlightened country.

But although we know enough of these and kindred epidemics to abjure all apprehension of their contagion; and although they are now every where regarded as strictly atmospheric, and their origin traced to exhalations from the decomposition of animal or vegetable substances, under the combined influence of moisture and heat; and although barometrical and meteorological science has thrown some light on the cause and causation of these maladies; yet the precise nature of this miasma, malaria, or whatever it may be called, has hitherto baffled investigation, and seems to defy our scrutiny. Still, however, we know enough of its *modus agendi* to assist us in detecting and removing the sources whence it originates, and in controlling and removing its

effects upon the public health, by the appropriate means within the power of enlightened science; and this knowledge, imperfect as it is, has every where diminished the severity and fatality of such epidemics, as well as prevented their more frequent recurrence.

That there are several striking points of analogy between the several epidemics so familiar to us in America, and the Cholera of the last season, as it prevailed among us, must have been obvious to all who have made observations upon the one and the other. The peculiarity of the previous season, the alternate heat and moisture of the air and surface of the earth, the unusual influx and reflux of the tides, have one or all been remarked in every place. The great *prevalence* and *spread* of the disease in those sections of different cities where intermittents and remittents are usually common, and the almost entire *exemption* of those sections which had been cleansed, ventilated, and filled up, to prevent the recurrence of yellow fever where it had formerly appeared, as in the first ward of New York, and Fell's Point in Baltimore, are facts which are too obvious to escape notice, and which are strongly corroborative of this analogy. Besides the sudden disappearance of the Cholera on the *first frost*, as seen in Canada, in our several cities, and especially in New Orleans, cannot fail to remind us of its similarity, in this respect, with the Yellow Fever and our other autumnal epidemics. And the still more striking fact, that the Yellow Fever appeared in New Orleans, as usual, during the last season, and was soon followed by the Cholera, both diseases

for a time raging together; and in a more concentrated state of the morbid cause, the former giving place to the latter; are circumstances which go very far to show that both diseases originated from the same cause, differing only in the degree of its intensity.

Besides these several points of resemblance, the particular locations in which the Cholera exhibited its most appalling features, and resulted in the most signal fatality, in every city where it prevailed, demonstrated very clearly that its origin was to be traced altogether to local causes. Witness the localities of the Five Points, Corlaer's Hook, Laurens-street, Harlem, &c. in New York; and similar facts were exhibited in the neighbourhood of the Brick-Yards at Philadelphia; Ruxton Lane, in Baltimore; and on the line of the Canal, near Washington, D. C. Witness also the memorable mortality at the Alms-house at Poughkeepsie, Bellevue in New York, and the Arch-street prison, Philadelphia. All these are so many clear and convincing arguments in favour of the fact, that the exhalations from filthy and ill-ventilated streets, alleys, and houses, and those from crowded apartments where personal cleanliness or wholesome fare is neglected, absolutely originated the malady, and also gave it its alarming character.

From these and other similar facts, it must be apparent that the predisposition to Cholera was superinduced from atmospheric causes, as in our other American epidemics, and hence more or less of premonitory symptoms were felt by nearly all of those who inhaled the vitiated air of such localities. As in others, so in this epidemic, thousands who felt this

predisposition for days, and even weeks, escaped the onset of the disease by avoiding its exciting causes; while others, though unconscious of the predisposition, suddenly fell its victims without a single premonitory symptom, perhaps by some excess, or in some few instances without any overt imprudence, although such cases were exceedingly rare.

Among the exciting causes to which sudden and alarming attacks of Cholera were attributed, very many articles of diet and drink have been named; and indeed many of the proscribed articles were almost invariably followed by its visitation in however small quantities they were used. In general, however, it may be remarked, that it was not owing to any specific or poisonous quality of the fruits or vegetables eaten, but to their *indigestible character*; and hence many of the victims of the disease were rigidly scrupulous in abstaining from every thing which was proscribed as hurtful by any authority. Some of the worst cases in New York were of this character; and occurring in persons strictly temperate, as well as rigidly abstinent from the supposed causes of the disease, they excited much astonishment and alarm. In all such cases, however, there was found, on careful inquiry, evidence of previous derangement of the digestive organs; and in many of them we had the clearest evidence that animal food had been eaten in a quantity greater than the stomach was capable of disposing of; and as most kinds of meat were strenuously recommended, it was generally eaten more freely than ordinary. A majority of the cases occurring among the tempe-

rate, under my own observation, were found to be enormous eaters of flesh.

Observation and experience clearly demonstrated in multiplied instances in this city, (New York,) as elsewhere, that any articles of food, whether animal or vegetable, undergoing fermentation or putrefaction in the stomach, were exciting causes of Cholera in the predisposed, whether with or without premotory symptoms. And as these processes quickly follow in the temperature of the gastric juice, if digestion does not overtake the food soon after its introduction into the stomach, especially in the debilitated state of that organ in the predisposed, it is not to be wondered at that Cholera should be excited in such persons, either by a quality of food indigestible in itself, or by too full a meal, or by too long fasting, or by previously existing dyspepsia. Facts which are familiar to physicians experienced in the disease, will go very far to sustain these views as rational and conclusive; and if they are admitted, many of its phenomena are accounted for which are otherwise inexplicable.

The following table exhibits the articles of food and drink which, in this city, were distinctly observed to excite the attacks of Cholera in individual cases among the predisposed. They are placed as nearly as possible in the order in which they were observed to produce this result:

DRINKS:

Ardent Spirits,
Beer and Ale,
Wine.

FOOD :

Pork, fresh and salt,	Peaches and Pears,
Lobsters and Crabs,	Blackberries,
Green Corn,	Cherries,
Clams and Oysters,	Most other fruits,
Watermelons,	Beans and Peas,
Cucumbers,	Cabbage and Greens,
Strawberries,	Cheese.

MEDICINES :

Every form of spirituous liquors and fermented drinks,
Opium, in any form,
Rhubarb, Jalap, and other drastic cathartics,
Nostrums of all kinds.

It may be found that there are individuals who continued to eat and drink most, and perhaps all of these articles with impunity ; but still, it is the fact, that cases occurred almost daily so immediately after taking each of them, that it was difficult to avoid the impression that these were the exciting causes. Especially was this the case if these articles were eaten or drank just before going to bed ; and a full meal, under such circumstances, produced an attack before morning, in numerous instances, however simple the fare. In some melancholy instances, a little crackers and cheese, with a glass of beer or wine, taken before retiring at night, has developed the disease in a fatal form before morning, and in persons who were not previously sensibly indisposed.

The fact that some few persons continued to drink rum, and eat pork and beans, cucumbers, watermelons, and the like, through the whole course of the

disease, without suffering an attack, are to be regarded as extraordinary escapes, and by no means render it safe to imitate them, when, in an overwhelming majority of cases, they were found to be so mischievous. And on a recurrence of the epidemic, therefore, prudence will dictate that we avoid those articles which experience has taught to be pernicious and unsafe.

III. *Of the Treatment of Cholera.*

Having now described the disease in its various forms, and having treated of its remote and exciting causes, the reader is prepared to understand the remedies which are to be recommended for its removal, as well as the principles on which those remedies are employed.

When Cholera appears in any place, and begins to spread, it is utterly vain to remove with the hope of fleeing from the disease. The remote causes which we have placed in the air have already excited the predisposition in all who have inhaled it; and however rapidly they may leave the city, or however distant they may flee, they carry with them the epidemic constitution, or the predisposition. The effect is already produced by the morbid cause upon the brain and nervous system; and all are predisposed to the epidemic who live within the atmosphere of its influence. This fact should be well understood, as it would show the importance of prudence and

discretion in avoiding the exciting causes, as well as the consummate folly of removing our families, especially when we are liable to suffer an attack after we have gained a location free from the epidemic influence, and at the same time beyond the most judicious means of relief. Very many have fallen victims to the disease by removal, who, had they remained at home, might probably have altogether escaped an attack. Persons who remove without remembering that already they have become predisposed by exposure to the cause, throw off all restraint, and live as though they were safe from the disease. They therefore suffer an attack which might have been prevented by judicious precaution; and being frequently distant from medical aid, are beyond hope before physicians can be procured. Such instances were by no means rare the last summer, and ought to serve as a salutary lesson on the recurrence of the epidemic.

This epidemic constitution or predisposition, however, may present no sensible signs, although its existence is certain in all the inhabitants of a neighbourhood or city where the Cholera, or any similar epidemic, begins to prevail. In some cases, however, it may be recognized by a sensation of debility and indisposition to motion, of which many were conscious in New York, not only before any premonitory symptoms had appeared, but before there were any apprehensions of Cholera either felt or expressed in the city, and certainly before its existence here was certain. It may have existed for weeks prior to the irruption of the epidemic, and may ac-

count for many modifications of other diseases, which were deemed by physicians as unusual and inexplicable. Indeed, the intestinal irritation and morbid excretions, so familiar in the prevalence of the Cholera, had attracted the attention and elicited the remark of many discriminating physicians for six weeks before the Cholera was reported as here, and these symptoms were often troublesome and sometimes fatal in May and June, in other and distinct diseases. And although we could not then predict the spread of the epidemic, yet, on any future season, these signs would be regarded as premonitory of a visitation.

But it may be remarked that, however manifest the predisposition, even by sensible signs, such as those we have named, the disease may be altogether avoided by carefully abstaining from the exciting causes. And should this epidemic constitution be still more clearly manifest by the appearance of premonitory symptoms, yet still it is by no means certain that an attack will supervene, if prudent measures be adopted and pursued.

To the predisposed, including all the inhabitants of the region where the epidemic has commenced its ravages, I would recommend the following rules :

1st. Let care be taken to avoid all unnecessary exposure, especially to the night air; let the feet be kept dry and warm, and the skin protected by flannel, changed twice at least in the week.

2d. Let an entire change be adopted in the *quantity* of food taken into the stomach, as well as its quality. The articles eaten should be such as are easy of digestion, and all of these very moderately.

A full meal will often bring on an attack, whatever be the kind of food taken.

3d. Avoid all undue excitement, whether physical or mental; any exertion long continued, and especially to fatigue, will frequently prove an exciting cause. Hard labour, close study, or an indulgence of the exciting passions of the mind, must be carefully abstained from.

4th. Above all things, take no medicines as preventives, by whomsoever recommended; and especially no vinous, spirituous, or malt liquors. Any stimulant, of whatever kind, habitually used, even in moderation, is found to give a predisposition to all epidemic diseases, and especially to Cholera, frequently becoming the exciting cause of the most desperate and unmanageable attacks.

5th. Preserve a calm composure of mind, as far as possible, and indulge a confident security of immunity from an attack while you thus avoid the exciting causes. The depressing passion of fear, when cultivated, often excites the disease.

But to those who are attacked with what are called "premonitory symptoms," which most frequently arise after some imprudence, I would recommend that they view the diarrhœa, not in the light of an attack of Cholera, but as an admonition that they have erred in subjecting themselves to some exciting cause, and that they are now *liable* to an attack. And as nature has aroused for its own protection, let them on no account interrupt or suppress this salutary process by astringents, tonics, or stimulants, of any kind; and, above all, avoid opium,

brandy, or wine, as you would shun the face of a serpent.

If there be any considerable nausea or vomiting present at the commencement of the diarrhœa, or if these precede it, drink half a pint of salt and water, go to bed, apply a bottle of hot water to your feet, and promote a gentle perspiration. The effect of the salt and water will be, that you will vomit the contents of your stomach, and a slight purgation will follow. If you are not then entirely relieved, you may find it necessary to take 15 grains of calomel, and perhaps follow it in four hours with an ounce of castor oil. If, in the mean time, you eat nothing, and drink *cold water* only, your premonitory symptoms will be over, and all hazard of an attack is removed.

But if you have been living abstemiously, you will have little nausea at first, and you may take therefore 15 or 20 grains of calomel at once, and alone. This done, will, in ninety-nine cases in a hundred, fully answer the purpose, if aided by the recumbent posture, and the other means mentioned in the last paragraph, and the appearance of bile in the discharges will give evidence that the danger is over. It is sometimes necessary, however, to repeat the dose of calomel, and even follow it with oil, if the diarrhœa have existed for any length of time, and been neglected.

If it have been neglected too long, and with the diarrhœa there be a tightness in the chest felt on breathing, or any increase of the spasmodic twitching of the muscles has supervened; and especially if the calomel does not have its desired effect, and the cha-

racteristic discharges continue notwithstanding; then the patient should be bled. Indeed, so important is this course, that, as an auxiliary to the calomel, it should be pursued in all violent cases. Professor Sewall, of Washington, D. C., directed all the cases of "premonitory symptoms," among the labourers on the canal, to be bled, with the other appropriate treatment we have named, and although a signal fatality had previously occurred, not a single death took place from the day on which the bleeding practice was commenced. My own experience has fully tested the propriety of this course, nor do I recollect a single case treated by me in the premonitory symptoms by bleeding and calomel, which was my usual practice, which afterwards suffered an attack of the disease, although many of them had been neglected and were violent when I saw them. A few hours after the bleeding, the bilious discharges from the bowels following a single dose of calomel, gave evidence of the entire removal of the morbid action; and all the symptoms immediately subsided.

Nearly all the cases of mortality in New York, occurred among those who had neglected the premonitory symptoms, or what is worse, had treated them by opium and brandy. We except, of course, the few instances which came on suddenly, without any premonition. These, therefore, were generally in the stage of collapse or asphyxia, as it is called, sometimes the blue stage, and which has been minutely described in a previous chapter. This was the condition of most of those who were carried to our hospitals, and whatever may be thought of the treatment generally

pursued in those of this city, and whatever has been said of the fatality occurring in them, it is but common justice that it should be known, that a large majority of the patients sent to the hospitals had been for hours in this blue stage or collapse, before their admission. And when the additional fact is remembered, that most of these were dissolute, filthy, and drunken subjects, the mortality will cease to be wonderful, and it will rather be matter of astonishment that any such were cured by any treatment. Though unconnected with either of the public establishments, and although I strongly reprobate the plan of treatment pursued in some of them, yet it is due to truth, that these important facts should be known and appreciated; and the gentlemen concerned are entitled to this exhibition of facts, in any strictures which are made upon them or their hospital practice.

The symptoms characteristic of this stage, are those of Cholera, and any previous or subsequent symptoms, possess no diagnostic character by which they can be certainly distinguished from analogous symptoms, occurring in other diseases. When these are present, therefore, or a majority of them, I regard the case as well marked, and the condition of the patient presents to my mind, a state of CONGESTION, which, unless removed, must infallibly be fatal in a few hours. Upon this view of the subject, my treatment of Cholera has been founded, and I should therefore have pursued it, if it had never been proposed or tried before me; and I would have carried depletion to the same extent to which I have ever used it, if no medical authority upon earth had existed to sustain

me. Indeed, the admission that it is a disease of congestion, would lead any mind to the same conclusions and practice. Accordingly, some of the best authorities on this subject are directly in point, and amply sustain the bold and energetic treatment for which I contend, and the triumphant results of which I had the happiness of witnessing in my own practice, and also in the hands of others equally successful.

In these symptoms, therefore, my chief reliance is on the lancet, and I prefer this to leeching or cupping, although both have found advocates, and both may be useful, but only as auxiliaries, if the congestion be as great as that we witnessed in the cases here. The treatment of this condition of the system ought to begin by a full bleeding, to be repeated as often as the circumstances demand, and this will often be three or four times in the course of twelve hours.

My next remedy, in point of order and importance, is Calomel, in doses of twenty or thirty grains, to be repeated every two, three, or four hours, according to the urgency of the symptoms. And this agent I employed alone, uncombined with opium or any other auxiliary.

On opening the vein in these cases, the blood will be found nearly of the colour and consistence of tar, and will flow only by drops, and often requires to be forced by mechanical means. In such cases, if external heat and frictions to the surface of the body did not succeed, I adopted the expedient often used in other congestive diseases, of exhibiting *ice* internally, small pieces being rapidly swallowed. This plan never once failed me, and by it I could obtain the

quantity of blood which the emergency called for, thus unlocking the oppressed circulation. Very soon I found the ice indispensable to control the vomiting, and have often succeeded thereby in allaying the thirst without drinks, and controlling a stomach so incorrigible that it resisted all the other remedies usually employed.

The importance of this quick and plentiful abstraction of blood arises from its accumulation in the internal and larger vessels, which constitutes, as we have said, the very essence of the disease. This accumulation, together with the profuse discharges of the watery part of the blood, prepares the congested mass for coagulation, to which the state of *rest*, in which asphyxia results, disposes it. The effect of this congestion upon the circulating mass, first affects the liver by reason of its peculiar organization, and the absence of bile in the passages, is to be attributed to a *spasm* in the ducts leading from the liver and gall-bladder into the intestinal canal, an opinion which dissection abundantly confirms. By large and repeated bleeding, a change is not only effected upon the circulation, and the blood thereby prevented from rest, which favours its coagulation; but a relaxation of the extreme vessels, as well as of the ducts and ureters affected with spasms, often resulted in the worst cases, where sufficient blood could be drawn, in an immediate secretion of bile and urine, as well as the restoration of warmth to the surface, which before had been colder than that of a corpse. Indeed, I have several times heard the patient say, "I am getting warmer while the blood flows," when the coldness

had been sensible to himself, and inquire the cause of what seemed to him so singular a phenomenon. Another important result of bleeding, as manifest in this as in other diseases, was, that it rendered the subsequent remedies efficient; for in many cases where bleeding was not premised, neither calomel nor any other medicine had its appropriate effect, in however large doses they were given.

I know that many have objected to bleeding where the skin is cold, and the pulse is extinct; because they have not the signs present in other diseases, and supposed to afford indications which infallibly dictate its propriety. And some physicians have brought this practice into disrepute, by bleeding timidly and with a sparing hand; and because no sensible effect is produced by four or five ounces being drawn, they hastily close the vein, and let the patient die a victim to their superstitious fears. They forget that the symptoms are those of *indirect* debility, and that so far from apprehending that they will weaken the patient, if the bleeding result in *direct* debility, their patient is safe.

The names of Johnson, Scott, and Ennesly, are familiar to all who have studied the history of Cholera, and the comparative merits of the various plans of treatment pursued by Asiatic and Indian practitioners. These gentlemen had undoubtedly the best opportunities of judging on this subject, and they unite in their testimony to the importance and necessity of blood-letting.

Dr. Ennesly says, that "the blood on opening a vein is at first thick, black, and comes away in

drops; at length it becomes thinner, and flows with more ease, till the colour changes to a bright red. This is a change which should be always looked for; and whether it takes place after the abstraction of one ounce or thirty, is of no consequence; that change must take place before the patient can be saved." He adds, "If blood-letting has not uniformly been followed by favourable results, it will be found to have failed most frequently when practised by timid hands; where small quantities have been taken; such, for instance, as might be yielded by remote branches of vessels; but if the evacuation be carried till its effects reach the internal vessels and the heart itself, then the circulating system will be freed from an oppression which impeded its functions, and it becomes equal to the task of propelling the mass of blood."

Dr. Scott, when speaking on this subject, remarks, "It requires no common effort of reasoning or reflection to arrive at the conclusion, that when the powers of life appear depressed to the lowest degree,—the pulsation of the heart all but extinct,—the natural heat of the body gone,—the functions of the system suspended, and incapable of being revived by the strongest stimulants—the abstraction of blood should yet prove a remedy against a train of symptoms so desperate. Indeed, blood-letting, in the more aggravated forms of the disease, is a remedy so little indicated by the usual symptoms, that its employment in the cure of this fatal disease must be regarded as affording a signal triumph to the medical art."

Dr. Johnson was probably the first who tested this

practice, to which he was led by the obvious venous congestions which dissection presented, and by the uniform fatality of every modification of stimulation which has ever been employed. It was the result of reasoning and reflection originally, but his experience in India has confirmed its propriety, safety, and success.

Bleeding, therefore, ought to be undertaken in such cases with the full persuasion, that if we succeed in obtaining a sufficient quantity, the patient may be saved; and friction, bathing the arms in warm water, opening veins or arteries, if necessary, and the internal exhibition of ice, as well as rubefacient applications, and heat to the external surface, should all be employed as auxiliaries if necessary. Dr. Scott directs, that "the physician must not desist by any intermediate accession of debility or collapse, nor tempted to rest satisfied with any temporary melioration of pulse; his object goes beyond the present moment, and he feels confident, that if he can fully unload the internal vessels, he will save his patient, and if he fails, he will most probably lose him."

These authorities are referred to with the design of showing that the extensive depletion which has been recommended, even in the cold, collapsed, or blue stage, is not novel and unheard of, even in this epidemic; and with the hope that the testimony of Broussais in Paris, and those who have proven its success here, may receive confirmation, and that none may be deterred from adopting it, even in the most desperate cases.

I have dwelt thus long upon blood-letting as a re-

medy in Cholera, because I believe it to be the sheet-anchor on which our firmest reliance may be placed. And if there has been a single instance of recovery from well characterized Cholera without blood-letting; if there be a single living man or woman who has been recovered from deep collapse without bleeding, I frankly affirm I have never seen, or known, or heard credible evidence, of such an instance, and yet hundreds now survive after the whole train of symptoms had subsisted for hours, who owe their preservation to large and repeated bleedings.

Immediately after full bleeding, with the auxiliaries which have been mentioned, I administer uniformly a full dose of calomel, as stated above, of twenty or thirty grains, and repeat this every few hours, as the emergency demands, following it by purgatives or enemas, when indicated, though this was but seldom. For the relief of violent and obstinate spasms, I have witnessed extensive trials of external friction by hot chalk, lumps of ice, flowers of sulphur, Cayenne pepper, cantharides, the moxa, and various other powerful agents, applied to the skin; but I could never attain any evidence of the specific virtues of either of these modes of practice; and yet I never failed in controlling and removing the spasms by copious blood-letting, even when all these and large doses of opium had entirely failed. Of other remedies I have but little to say, as I conceive them all of minor importance. The mercurial ointment, with Cayenne and camphor, I have often used, where every effort to abstract blood has been abortive, from being undertaken too late; but though I have had such pa-

tients rubbed incessantly for six hours over the whole body, it has not succeeded in my hands, as it is said to have done under the management of Dr. Roe and others. The "camphor practice," as it is called, I have seen relied upon in a number of instances, until the patient was dead; but I never could hazard a dependence upon it myself, from any evidence of its usefulness which I have been able to obtain.

The brandy and opium plan of treatment, I fearlessly affirm, is not only irrational and absurd, but uniformly fatal. Without censuring any body, I may here remark, that I never used a drop of ardent spirits, either externally or internally, in the treatment of Cholera, nor do I believe that it has been used with success by any one. That I have seen the worst results from the internal use of brandy and opium, administered by others, is one of the most painful reminiscences which the destroyer has left behind him, and one which will never be erased from my memory. It is true, that the patient under their use, or that of any other stimulus, will *tell you* that he is getting *better* all the while, but presently die of apoplexy of the lungs and brain. If I had a voice which could be heard throughout the land, I would lift it up, and warn my countrymen of the fearful consequences of using ardent spirits as a preventive or cure of Cholera.

Finally, with respect to the treatment of "consecutive fever," or the stage of reaction, I have but little to say, for the reason that the symptoms and treatment of this fever, is in no wise different from similar reaction in other congestive diseases, and has no one characteristic of Cholera. In the hundreds of my

own patients, I never saw this consecutive fever either protracted or dangerous, if the necessary depletion had been premised; and, indeed, the reaction was for the most part readily controlled. The only exceptions to this statement were consequent upon imprudence, and mismanagement of convalescence.

I have thus briefly presented all that I consider important in the medical management of this formidable disease, and should it unhappily revisit us as an epidemic, I have full confidence that similar success, to that I have witnessed, will follow the same treatment, in other hands. I claim no merit for novelty, nor pretend to any exclusive skill; but my opinions are the result of much reading and reflection—a close, patient, and arduous investigation of the epidemic, in its effects upon the living and the dead—and confirmed by an experience somewhat extensive, during the late visitation of this cruel scourge. And it is thus submitted to the public, with no other motive, than that my experience may benefit others in a like emergency.

IV.—*On the Means of Prevention.*

If the views I have taken of the nature and causes of the Cholera be correct, it is entirely of local origin, and the liability to its recurrence as an epidemic will depend upon the existence or removal of the local causes, in whatever they consist. And as I disclaim the opinion of its contagiousness or transmissibility by persons or things, it is obvious that no apprehen-

sions need be indulged of its importation from foreign countries or distant places ; and equally so, that all quarantine regulations are needless and absurd.

In this remark, I refer, of course, to the ridiculous restrictions which are imposed upon the crews, passengers, and cargoes, arriving from ports where the disease prevails ; and not to such regulations as require the removal of bilge water, and the thorough cleansing and ventilation of vessels on their arrival in port. These are justifiable, especially in warm weather, to prevent their being local sources of the disease, for filth is not less pernicious in a ship than in a house. But for these purposes a few hours is ordinarily amply sufficient, and can by no means authorize the inconvenience and sacrifice occasioned by a detention of weeks. And in the case of vessels on board of which Cholera has originated or occurred during the voyage, the same processes of purification having been adopted as in other cases, the restrictions imposed upon the passengers, and the fumigation of their baggage, is both unnecessary and cruel ; for there never has been any evidence in India, or elsewhere, that the disease has been communicated from a sick body after being removed from the epidemic influence, much less being transmitted in the persons of the healthy, or by the removal of goods, under any circumstances. The whole of these absurd prohibitions of Cholera are unworthy any civilized and enlightened country, being solely the offspring of empiricism and superstition.

If the remote cause of Cholera be atmospheric, or malarious, as is now acknowledged to be the fact with other epidemics, and if the miasma or malaria

depend upon soil, climate, temperature of the season, and other barometrical phenomena, it is obvious that these can only be modified or counteracted, when the causes of the infection are detected, and are found to be capable of removal, or modification. That a single extensive marsh or pond of stagnant water, has in certain seasons produced an epidemic of dangerous and even fatal character, has been frequently observed ; and that the filling up or draining of the one and the other, has entirely annihilated the disease, has been often repeated and long known in this and in other countries. In like manner the existence and prevalence of Cholera have been arrested by similar means, by avoiding the remote cause or removing beyond its influence. Mr. Pettigrew, in his pamphlet on Cholera, has instanced a skilful manœuvre of the Marquis of Hastings while in India, by which he put an end to the devastation produced by Cholera among his troops, and which consisted in removing his men fifty miles only from the spot they occupied, to another where the soil was dry and elevated. He removed both the sick and the well ; and from the day they pitched their tents beyond the epidemic atmosphere, the sick convalesced, and the healthy escaped the disease. Dr. Granville, of London, relates that an officer high in rank who served in India, assured him, that while marching with his regiment in a particular direction, it had often happened that he was told that the soldiers at the head of his column had been attacked with Cholera ; upon which he invariably altered his line of march, sending some to the right and some to the left of the road they had occu-

pied, and the disease no longer appeared among the soldiers.

Without multiplying such facts as thus fully prove the non-contagiousness of Cholera, and conclusively show that the cause, whatever it is in its essential nature, is of local origin, and limited extent, like other epidemics; I proceed to remark, very briefly, on the means necessary and proper to prevent its recurrence, as an epidemic, in this city and country. And as the city of New York was one of the nuclei, around which the miasmatic blight, poison, or obnoxious something in the air, which is the remote cause of Cholera, did prevail during the months of July, August, and September last, I shall use this case of our *own city* as an illustration of my remarks, because wherever similar causes have existed, similar effects have followed.

Having already stated that the epidemic influence exhibited itself in other diseases, in this city, during the months of May and June, it is not easy to state when or where the first case of well marked Cholera was known to occur. A very great panic had been spread among our citizens by the accounts of its ravages in Canada, and especially was this panic augmented by the commission despatched thither by our city councils, to make inquiries on the subject. Many of our citizens, as well as some of our physicians, were in hourly expectation that it would be imported from Canada or elsewhere, and were watching for its appearance with a commendable diligence, so far as their motives were concerned, and with a zeal as innocent as their fears. Whether the first true case

was found in Cherry-street, or Roosevelt-street, near the East River, or in Reed-street, near the North River, whether on the 27th of June, or on the 2d of July, is not material for our purpose, nor is it possible certainly to decide. But it was not until the 3d of July that it was officially announced as existing in the city, and when thus ascertained to exist, we may appropriately inquire what parts of the city were affected, and what was the character of the patients. If the points of the city first affected were those at which foreign vessels arrive, or emigrants land who come by the way of Canada, and if the cases were among these emigrants, foreigners, sailors, or their families, then we have some evidence that it originated in contagion, especially if it spread among those who had intercourse with the patients, and among those alone. But if, on the other hand, we shall find that a great number of cases appeared simultaneously in different and distant parts of the city, and in patients who did not know of each other, and could have had no possible intercourse; and if it shall also appear, that these cases occurred, and were at first altogether confined to the malarious parts of the city; and that no instances of persons recently arrived from infected places, were among them; then it is conclusively demonstrable, that our epidemic was of local origin. Such are the facts, as they are known and attested by all who have thoroughly investigated the subject.

And, beside these facts, it may be remarked, that in nearly every case occurring in the first fortnight of its prevalence, the houses were small, filthy, and crowded with inhabitants, and the intemperate were

its first victims almost without exception. The locations most severely affected were on the borders of the rivers, where the ground is low and marshy, as Roosevelt, Cherry, and Water-street; at the foot of Reed-street, Duane-street, and vicinity; the neighbourhood of the Five Points, the house in Broad-street, with an old common sewer under it, in which ten fatal cases occurred; Laurens-street, Corlaer's Hook, Yorkville, Harlem, Bellevue, and Greenwich Village. These were the parts of the city where the pestilence raged in all its violence, and where fatal cases occurred in the greatest numbers; so that for a time, it has been properly remarked, that we suffered from a number of *endemics*, rather than a general *epidemic*. As, however, the morbid cause in the atmosphere of these nuclei accumulated in amount and intensity, it seemed to mingle from these several points, each of which was a focus, whence the epidemic influence seemed, to some extent, to pervade every part of the city and its vicinity. Hence individual cases occurred in parts of the city the most remote from these locations, proving that the predisposition was general, and of course the influence of the remote cause was almost universally felt, by sensible signs.

It is worthy of remark here, that the locations in which its ravages were the most dreadful, were not only malarious, by reason of being near to filthy docks, slips, common sewers, and frequently being made ground, but the majority of the inhabitants at several of these points were crowded together in filthy apartments, as in Laurens-street, which was significantly denominated "rotten row;" a name

which denoted the physical as well as moral condition of its wretched and abandoned inmates; and where, in the neighbourhood of a single square or block, nearly two hundred miserable victims perished in a few days. The same remark applies to the devastations at that notorious horde of filth, infamy, and vice, known as the "Five Points," where a larger proportion of cases occurred within a circumference of a few hundred yards, than in whole wards differently circumstanced. And it is equally worthy of remark, that of the three thousand licensed grog shops with which this city is disgraced, nearly half of them are located in the several parts of the city we have named, as having suffered most from the pestilence. And indeed, there is probably not one of all the three thousand, which did not furnish one or more cases either in the person or family of its keeper, or among its daily customers. I myself witnessed a number of such examples, and those too in those parts of the city where there were the fewest cases. In many of these grog-shops, the disease assailed its victims while there, and, unable to leave the premises, they were carried thence to the hospitals, and in a few hours to the grave. One of the keepers, after such a scene occurring beside his counter, closed his doors, and abandoned the traffic, saying that "the road from his shop to hell was too short; he could almost see the way there," and he has since changed his business. The experience of our Hospital Physicians, if it were published in all its loathsome details, would furnish facts on the connexion between Rum and Cholera, and especially

between rum and death, which would abundantly confirm these statements. The "Temperance Recorder" at Albany has made an expose on this subject, which, however horrible, has a parallel here, if the facts were obtained by the same diligent investigation. Of several hundred cases of Cholera, either wholly or partially occurring under my own eye, a very large and frightful majority, were either in intemperate persons, or excited by the use of spirituous liquors as a preventive or cure of "premonitory symptoms." And after a patient investigation, with the aid of vigilant friends, of the mortality in this city, I have been led to the conclusion, with at least tolerable accuracy, that of the thousands who died here of Cholera within three short months, there were less than five hundred who were not habitually intemperate. One of our benevolent societies relieved during the last winter one hundred and fifty widows, whose husbands had all died of Cholera, and all of whom were drunkards. And in the case of intemperate persons, the disease was not only more rapid in its progress, but almost uniformly fatal, as the hospital practice amply proves. Indeed, one of the physicians who was incessant at his post in one of these establishments, told me that he had not known a single drunkard cured, by any treatment.

These facts are thus presented, as introductory to the means of prevention about to be suggested, and on which our future visitation, and the extent of that visitation, should the epidemic again recur, will greatly depend.

First, then, I remark, that as the remote cause

exhibited itself first in filthy neighbourhoods, the Corporation should, *before the warm weather commences*, see that our streets, lanes, alleys, yards, and houses, are thoroughly cleansed and ventilated, and that all our docks, slips, wharves, and sewers, be carefully purified, and *kept so* by the vigilant inspection and authority of officers appointed for that purpose.

Secondly. They should also see that all marshes, pools, or ponds of standing water, should be drained and filled up *early in the Spring*, and wherever there are *filthy* stables, whether for horses or cows, or pens in which swine are kept, they should be removed from the city, unless their filthiness can be prevented.

Thirdly. Let our constituted authorities absolutely prohibit the traffic in *ardent spirits*, by wholesale or retail, in any population great, or small, when the approach of the Cholera is threatened. If this cannot be done in anticipation, it should by all means be enforced on the first appearance of the disease in any city, town, or village.

Fourthly. Let all our prisons, alms-houses, or other crowded apartments, as those of the poor especially, be daily subjected to inspection, cleansing, and ventilation, and let special attention be paid to the quality of the meat and other articles of provision.

Fifthly. Let physicians be appointed and stationed, day and night, in every neighbourhood, on the first appearance of the epidemic, to be accessible at all times by the poor, for the treatment of the premonitory symptoms, and let the plan of treatment be agreed on by the Medical Department of the Board of

Health requiring uniform and discreet depletion, and absolutely forbidding the use of opium or ardent spirits, either as a preventive or cure, except under such restrictions as said department might accurately define.

Sixthly. Let clean hospital buildings be provided convenient to every section, to which those who by neglect of the premonitory symptoms, or by mismanagement or imprudence of any kind, shall suffer an attack, may be promptly sent, and let the plan of treatment be defined and enforced; and on any extensive fatality occurring in any one of these, let there be an immediate change in the professional head of the Medical Department.

Seventhly. Let measures be taken to enlighten the people generally in the nature of the disease, its causes and curable character, and especially its non-contagiousness, and this may be done by the circulation of handbills and tracts.

Eighthly. Let a system of diet and regimen be promulgated according to the dictates of enlightened science, and let this system be recommended through the clergymen of every congregation, especially insisting upon total abstinence from all stimulating or astringent drinks.

If these, or equivalent means be employed in anticipation, or on the first appearance of the epidemic in any place, its prevalence will be short, and the terror occasioned by its fatality will be greatly diminished, if not entirely removed. But if our municipal authorities will neglect their duty, until the filth of our streets, wharves, and other public places, become

proverbial, as during the past summer, and only *begin* their activity and zeal when the miasma has been generated, the mischief will be to a great extent irreparable ; and the very processes of cleansing to which they may afterwards resort, too often will be found only to aggravate the rage of the epidemic. And if the Corporation, amid the devastations of another scourge, should it again sweep through our city, will continue to sanction the sale and use of spirituous liquors in such perilous times, as was done in New York by three thousand licensed dealers ; then, we may expect a repetition of the calamitous results which spread such a gloom over our city and country during the last summer ; for experience has shown how short is the transition from the grog-shop to the hospital, to the grave, and to perdition.

The facts which the history of the past exhibits of the connexion between Cholera and rum, cannot be too often repeated, nor too strenuously urged upon our rulers or upon the public. Thousands are now dead of Cholera who fell by taking a little port wine, “brandy and water, or generous wine,” to prevent their being sick, and this too, disgraceful to say it, by high medical authority. In some instances, this was undoubtedly the sole agent which excited the disease and rendered it fatal. In this city, the grog shops were visible nuclei, around which the epidemic raged with unwonted fury ; and death, not disease, seemed to reign over the neighbourhoods where these haunts of the destroyer were the most numerous. Many of the keepers of these abominable styres of pollution, and some of their families, were swept

away ; and horrible to relate, other lovers of rum and its "wages," would re-open the shops thus vacated by the pestilence, and deal out Cholera and death, until they too became the victims of their temerity. In many instances, after burying one or more of their families, the keepers of these grog shops would become alarmed, close their doors, and fly from the city. But some of them were so covetous of the "wages of unrighteousness," that they would return in time to re-open their doors on Saturday nights, continue in the midst of their victims until Monday morning, when they would again leave the scene of danger, thus securing their Sabbath custom. Hence, as was frequently remarked, the reports were so fearfully augmented on each successive Monday and Tuesday, and universal panic pervaded all classes of our citizens, except the Honourable Corporation, who seemed to share but little in the consternation, and profit less by the lesson we were thus so dearly taught. For, by their authority and license, these deeds of infamy were perpetuated until the cold weather of the autumn arrested the epidemic, after thousands had fallen martyrs to the licensed and unlicensed dealers in rum.

I forbear to pursue this subject farther, for the heart sickens at the bare recital of these shocking scenes, which might have been arrested, to a great extent at least, by the Corporation, had they yielded to the conviction which death made so apparent, and suppressed the sale of ardent spirits during the epidemic by rigid enactments, as was done at Washington, D. C. with complete success. Instead of which,

they prohibited the sale of fruits and garden vegetables, which, compared with rum, were innocent; thus "straining at a gnat, and swallowing a camel."

With regard to disinfecting remedies, they must be regarded as at best equivocal in their character and in their effects. The burning of tar, brimstone, and other combustible substances, produce no other good effect than the kindling of large fires with any other material; and their offensive odour is not therefore compensated for by any specific virtues. The Chlorides of Lime, Soda, &c., are undoubtedly useful in attracting putrid and unpleasant odours of whatever kind to themselves; and yet the Chlorine, when used to the extent it was in some places, was quite as offensive to the olfactories, and even as unhealthy, when inspired into the lungs, as any of those for which it is prescribed as an antidote. These disinfecting agents are, therefore, of much less importance, and much less to be depended on, than people have been led to believe. To sprinkle Chloride of Lime freely into the gutters, privies, stables, and other filthy places in the city, may be a judicious expenditure on the part of the Corporation; and for the filthy apartments of houses where the disease, or death, has left an offensive stench, the Chloride of Soda in solution will be an appropriate antiseptic, to be sprinkled on the floors, or placed in a vessel on the floor. If either, however, be carried to excess, as is too often done, they cease to be useful, and are often directly mischievous.

On the subject of personal and individual means of prevention, I shall content myself with very brief

remarks, having partly anticipated this department of prevention in a former chapter.

A state of predisposition, or an epidemic constitution, as it has been called, is already superinduced, when the disease begins to prevail, in every man, woman, and child, who has been living but a few days and nights in the atmosphere of the infected city or neighbourhood. It is altogether absurd, therefore, to talk of *preventing* our being predisposed, or of escaping by leaving the neighbourhood, after being impressed with the remote cause. The true means of prevention, and those which would be almost universally successful, are the avoidance of the exciting causes, and thus rendering the state of predisposition one of perfect and entire immunity from the disease. All preventives recommended on any other principle proceed from ignorance or imposture, most generally from the latter; and all such remedies, therefore, which profess to prevent an attack by being taken before the individual is sick, are but the stupid prescriptions of mountebanks and quacks, not excepting the use of “brandy and water, or generous wine,” which are the best entitled to the epithet of quackery, of any in the whole catalogue of the nostrums for prevention.

First, then, let all indigestible food, of whatever kind, be avoided by those who are, or have been, exposed to the remote cause, and let there be no excessive indulgence in the morbid appetite by which an epidemic constitution is often characterized. The living should be plain, simple, and more sparing than usual, for the simple reason that most persons

in health eat twice as much at their meals as is either necessary or useful. To deny ourselves all vegetables and fruit from a superstitious fear, and, at the same time, load the stomach with an increased allowance of flesh, fish, and fowl, is the very climax of absurdity. Such preventive management has often excited the disease.

Second. Adopt the maxims of enlightened science, on the subject of ardent spirits, wine, beer, cider, and all other intoxicating drinks, and practise *total abstinence* from these and all other articles which stimulate the body beyond the healthy standard. This is the most important in the scale of preventive measures, and should be universally adopted, without regard to previous habits and modes of living. If persons have continued in the daily use of spirituous liquors or wine for years without having sensibly suffered in their health; yet now that they are impressed with the remote cause of Cholera, and have imbibed a predisposition, there is, there can be, no security, but in abandoning their habit at once. The cautions that have been given about the danger of changing the customs of living, and insisting upon a continuance in the usual allowance of ardent spirits, are but another of the changes which have been rung by the apologists for rum, and the publication of these directions multiplied the victims of the pestilence wherever they have been followed. If there be any one fact unequivocally taught by the experience of the last year, it is this; that rum, in any one of its forms, is not only a frequent exciting cause of Cholera, but the most frequent of all its causes; and hence it is

as true here as it has been proven to be in Albany, that among those who suffered an attack from other exciting causes, but few died; and among those in whom the disease was excited by ardent spirits, but few recovered. In Albany, it was accurately ascertained, and has been published by her indefatigable State Temperance Society, that but two cases occurred among the thousands of citizens who adhered to their pledge of total abstinence as members of their Society. This fact should be every where known, and every where appreciated, that the mischievous and fatal use of spirituous liquors, either as a preventive or cure, may never again so fearfully multiply the victims of the pestilence in any place, or among any people.

Third. Next to moderation in eating, and total abstinence from ardent spirits and other stimulating articles, strict attention should be paid to the condition of the skin, which, in such perilous times, ought not to be overlooked. Flannel next the body should be worn universally, and on a sense of chilliness occurring, the individual should bathe the feet in warm water before going to bed, and adopt some domestic expedient for inducing a gentle perspiration. Exposure to damp and wet weather was frequently followed by an attack.

Lastly. The mind should be preserved in a state of calmness and composure, and all undue excitement or depression be scrupulously avoided. Although the depressing tendency of fear has often excited the disease, yet the exciting passions, indulged to excess, as anger, &c., have also been productive of

the same result. Instances of this unhappy result from both of these causes, must have occurred under the observation of every extensive practitioner in this as well as other epidemic diseases.

It will thus be seen that, among the means of prevention to be used by individuals, I have recommended no medicines. Although thousands of nostrums have been recommended by as many quacks, and some of them, with their mountebank authors, have been puffed by certificates of members of my own profession, who have thus degraded their names, and still more, the professional titles affixed to them, yet I must pronounce all these nostrums, by whomsoever commended or sold, to be a base and unprincipled imposition upon public credulity; and many of them the result of an atrocious conspiracy against the property, health, morals, and lives of the community. With a knowledge of the direful effects of such imposture, in exciting the disease and rendering it fatal during the last year; and with a knowledge of preconcerted plans which have been devised to gull the vulgar and rob the ignorant, even in anticipation of the recurrence of the epidemic—I should be recreant to my duty as one of the guardians of the public health, if I did not utter this rebuke, and offer this warning, against so criminal and so mischievous an imposition. The pecuniary success which some of these boasted preventives received, during the last year, will doubtless embolden empiricism, should the Cholera unhappily revisit us; and if our population should generally be so gulled as to take these nostrums as preventives, even though they be only “brandy or wine,” we

shall suffer results quite as calamitous as those which the epidemic itself will inflict, and its mischiefs be incalculably augmented.

I have thus finished my brief observations on the nature, causes, treatment, and prevention of Cholera, with as much perspicuity as the subject will admit; and with the hope that their publication may be useful, especially in those places where it may occur hereafter, I now submit the whole to my fellow-citizens, with the ardent wish that they may never witness a recurrence of the scenes of the last year to the same extent, if, indeed, they shall suffer another visitation of this cruel epidemic.

From the expression of my own views, it will be seen that I regard a recurrence of the disease as fully capable of prevention, if proper means be adopted; and, even should it revisit us, that our Corporation may diminish its mischiefs, and lighten the calamity, by a suitable exercise of their authority. In the confident expectation that judicious means of prevention will be used, and the necessary authority exercised, for a time at least, I entertain but little apprehension that this city will be the scene of its visitation the present year. There may, and probably will be, sporadic or individual cases; but reasoning from analogy, it is not at all probable that Cholera, as an epidemic, will prevail extensively very soon in the same places which so severely suffered the last year, especially in the North and East, where our climate favours our success in its prevention. In the South, as in New Orleans, and on the rivers of the West, where large districts of malarious country are thickly populated,

there is much greater cause of apprehension. And it is very probable that in those places where the Yellow Fever has annually been epidemic, the Cholera may take its place; if, as I have contended, both arise from causes so similar in their nature, and differing only in the degree of intensity. Should this be the fact, however, I feel assured, that when enlightened views of the disease shall universally prevail, Cholera will be found to be much more susceptible of cure than the malignant or Yellow Fever, by which fatality our southern countrymen have so severely suffered. If the Cholera be successful in its progress through our country, in awakening the national, and state, and city governments, to the necessity of banishing all intoxicating liquors from the land, though its track has been one of devastation and death; yet, by this "consummation so devoutly to be wished," there would be more lives preserved from the drunkard's grave in a single year, than the Cholera would be able to kill, without rum, its most mighty auxiliary, in half a century. Indeed, statistical calculations of the comparative mortality during the last calamitous year, would satisfactorily demonstrate, if they could be accurately made, that in this country at least, where Cholera has slain its thousands, Rum has slain its tens of thousands, apart from the vast proportion in which both these "destroying angels" have united their deadly influence.

But to prevent the recurrence of this disease, I again reiterate the sentiment, that the public ought not to be misled by a reliance being placed upon

quarantine or other regulations, designed to obstruct its importation ; nor should they consent to withhold the expression of their merited censure upon our constituted authorities, by the contemptible pretence set up, after it has appeared, that it has been brought by importation, and transmitted by contagion.

Even now, while the present work is passing through the press, there is more than one city in the United States, whose Health Department is making little other preparation by way of prevention, than guarding against the arrival of vessels from suspected places, or such as have cases of disease on board, supposed to be Cholera ; and are quieting the apprehensions of the public by passing ordinances inflicting heavy penalties against a violation of quarantine.

Let the public demand of their representatives in the city governments, that the necessary work of cleansing the city should be diligently performed, not merely that officers should be appointed to do it, and paid with the public money ; but that they see that it is done. And I again repeat, that if it be neglected until the hot weather gives origin and being to the mischief, the public ought not to be satisfied with the show of great diligence after the disease appears, for the mischief is not only then irreparable, but the very attempts at purification will often only increase, if it does not originate, the mischief they are designed to remove.

A P P E N D I X.

A

BRIEF ESSAY

ON THE

MEDICAL USE OF ARDENT SPIRITS;

BEING

AN ATTEMPT TO SHOW THAT ALCOHOL IS AS UNNECESSARY

AND MISCHIEVOUS IN SICKNESS AS IN HEALTH.

AFFECTIONATELY INSCRIBED TO THE AMERICAN TEMPERANCE SOCIETY.

BY DAVID MEREDITH REESE, M. D.

OF NEW YORK.

APPENDIX.

So closely have the names of Cholera and Rum been united, in almost every country, since its epidemic history has been attracting public attention, that I have deemed this Appendix a suitable one to accompany the observations I have made upon our late epidemic. And I propose at present only a brief appeal to my professional brethren and the public, reserving to myself, as an ample subject for another volume, should life and health permit, the history, chemical nature, physiological, and pathological effects of spirituous liquors on the human body, as exhibited in the living and the dead.

For my present purpose it will be sufficient to remark, that alcohol was introduced into public favour at first by its *medical use*, and this was not only its first entering wedge, but it will be its last stronghold ; and while intrenched here it, will be utterly impregnable. It is said, with great plausibility, that it was first given in *drachm* doses, as a medicine, and therefore, though the dose has been increased both in quantity and in the frequency of its repetition, yet these doses are still called *drams* to this day. Be this

as it may, however, there can be no doubt, that this powerful agent was once used only medicinally, and that in extreme cases; and yet the facilities of modern improvement in distillation has made it so cheap and abundant, that until within a few years it was, throughout this and other countries, scarcely ever used as a medicine; but had become a common article of drink and of commerce, and was deemed one of the "*necessaries of life*." So habitual and universal was the practice of daily using ardent spirits in some form, that scarcely a family were content to live without it, and scarcely an individual could dispense with it, especially if called on to make any considerable effort, either physically or mentally.

Meanwhile, there were among the wise and good, some who escaped this whirlpool of fashion, and who mourned over the wide-spreading desolations of intemperance, but without perceiving any hope for those who were swallowed up in its vortex, and indeed unable to discover any way of escape for the multitudes of their fellow-citizens, who were slumbering unconsciously on the verge of a gulph, more horrible than the yawning mouth of any burning crater which ever smoked upon the summit of *Ætna* or *Vesuvius*. The dreadful statistics of pauperism and crime, disease and death, which they now discovered, were obviously the result of the vice of intemperance, (and which they began to collect, record, and contemplate,) disclosed a dark and melancholy picture of human wretchedness, which, as patriots and as Christians, they resolved to expose to public view, and call upon their fellow-citizens to

unite in an attempt to relieve, by removing the cause of these accumulated mischiefs.

After much reflection, many experiments, and a full interchange of opinion among the benevolent projectors of this scheme of philanthropy, and with a confident reliance on that God in whose name they trusted, and whose smiles and benediction they devoutly implored, they resolved to begin this great and good work, by imposing upon themselves individually a vow of total abstinence from the use of ardent spirits, and by calling upon their fellow-countrymen to unite with them in this vow.

Thus, by a small number of friends of their country, and friends of man, the "*American Temperance Society*" began its operations, and what is now dignified by the appropriate title of the Temperance Reformation, has been the happy and stupendous result. Already this cause has gained upon public estimation in this and in foreign lands, until millions of our fellow-men have joined their names and example to the holy enterprise, and hundreds of thousands have been rescued from the daily use of spirituous liquors, which might have proved their ruin, but for the timely influence of this Temperance effort. Such have been the victories over opinion, and custom, and prejudice, which this cause has achieved, that not only the use, but the traffic in ardent spirits, has sensibly diminished, and the ultimate banishment of the article from the nation, and from the world, begins to appear practicable in a short period, if the success of the enterprise be not prevented by some new counter-revolution.

In this state of acceleration gained by the friends

of temperance for their scheme of benevolence, there is one only obstacle in the way of the ultimate, complete, and universal victory of the cause, and but for this both the traffic and consumption of alcohol could be exterminated from the land almost at a blow. That obstacle is its "*medical use*;" and this is the last strong-hold of intemperance, into which the monster rum has been driven, and where he finds a safe refuge, whence he slays his tens of thousands. And, to speak without a metaphor, if this medical use of spirituous liquors is either defensible or allowable, the progress of reform on this subject is nearly at an end.

I believe that the opinion, that ardent spirits is either necessary or useful for any man while *in health*, is now nearly abandoned. Certainly no man having pretensions to character in our profession, would hazard his reputation by affirming it, in the face of the most enlightened and scientific opinions which have been elicited from so many distinguished sources; and especially when millions of our fellow men are demonstrating, by their high health, in every department of life, that they can, and do, totally abstain from spirituous liquors, not only without detriment, but with manifest and sensible advantage. This point is therefore amply established, that ardent spirits are never necessary or useful in health; and, therefore, no man can rationally object to the principles of the Temperance reformation on this account, at this day, whatever might have been said, and was said, before this question was settled, as it now is, and for ever.

This has often been affirmed by individuals before, but the whole weight of public opinion was against them, and hence but little impression was made upon the public practice. That learned and venerable man, John Wesley, nearly a century ago, declared that "ardent spirits was never necessary in health, and seldom would be in *sickness*, but for the awkwardness and unskilfulness of the practitioner." And although the former part of this sentiment is now demonstrated to be correct, yet the latter is still called in question, though it is equally well-founded, as I shall presently attempt to show.

In attacking this dernier subterfuge of ardent spirits, I am aware that I am liable to be ranked among those ultras in physics and in morals, who are ordinarily denounced as enthusiasts, fanatics, visionaries, and the like ; and thus, too often, by an opprobrious epithet, the advocates of truth are confounded in their honest and well-meant endeavours, by censoriousness rather than by argument. Indeed, I shall have arrayed against me, not merely all the male and female quacks in the land, with their boasted experience and alcoholic nostrums ; but I must contend with the sages and philosophers of medical science, many of whom have written largely on the wonderful and sovereign efficacy of Brandy and Gin, as specifics in various diseases. Besides all this, there are in all the standard text books, pharmacopœias, and dispensatories, thousands of valuable medicines prepared in alcohol, and thousands more of worthless medicines, which owe all their boasted virtues to their alcoholic menstrea. And add to all these, the

fact, that a great proportion of our regularly educated physicians have each a score of recipes or prescriptions, which, from time immemorial, have been given in gin, or spirits, or rum; and which they find both popular and profitable. And when it is recollected, in addition, that the experience of almost every family furnishes instances of relief in certain complaints by some form of alcoholic medicine, it will be seen that the array in behalf of the medical use of ardent spirits is a formidable one indeed.

But none of these things move me from the purpose I have distinctly avowed; to assail the "medical use of ardent spirits," as not merely unnecessary and injurious, but as the most powerful and mischievous source of intemperance, with which the nation is now afflicted, and the only considerable obstruction to the benevolent designs of the Temperance reformation.

The present fashionable use of ardent spirits as a medicine begins at birth, and is only relinquished when the individual is dead. No sooner is a child born into the world, than it must be intoxicated by the fumes of spirits, externally applied to the whole surface of the body, by some superannuated nurse, who has been taught to do so from time immemorial. This practice, although so universal, is a vile and mischievous one; and I never knew any motive for its continuance but the opportunity it affords the nurse to swallow a little during the operation. I never allow it in my presence, but direct cold water in its stead; and I believe many infantile diseases, in delicate children, result from this washing in rum.

If the child is not stupified by this outward operation, and continues to cry until it is troublesome, there are mothers, grandmothers, nurses, and often doctors, I am ashamed to say it, who will order herb tea with a little *gin* in it to make it sleep; and this convenient quietus of gin is repeated when sleep is desirable by the indolence of the nurse, every day and night, until the dose requisite for the purpose is so large that it is difficult to give so much, or the infant's stomach rejects it; and then comes the far-famed Godfrey's Cordial, Paregoric, or some other sleeping draught made of rum and opium, or some other intoxicating ingredient. Thus in earliest infancy does the medical use of ardent spirits often inflict injury which sends the child to a premature grave, or inflicts upon it a feeble constitution for life. Now, all this use of alcohol as a medicine, is understood by every man of sense in the profession to be not only useless, but hurtful; and yet it is still suffered, because, to oppose it, is to encounter the prejudice of every old lady in the land.

This, then, is one argument by which the necessity of keeping alcohol in the house, as a medicine, is insisted on; and it is as unanswerable as any other which the advocates or apologists for rum in medicine can furnish. And I affirm, in its refutation, that, for the purpose of washing a new-born infant, cold water in summer, and tepid water and soap in winter, is the only proper material; and that, to make it sleep, or for any other of the purposes for which gin and the like is given, the mother's milk, and this alone, should be introduced into the stomach; or, where

this is unavoidably absent, sweetened milk and water. There are more children killed in infancy by gin and alcoholic medicines, than die from all our infantile diseases beside.

But I cannot pursue this subject farther, and will pass on to remark, that another mischievous medical use of alcohol is the practice of bribing children as they grow up to take medicine in sugar-dram. When they become sick, and medicine is required, they are often induced to take it by mixing it in toddy, and then drinking a glass of the same to wash it down. The evil is not merely the counteracting effect of the alcohol, but that the child is taught that it is not only right, but desirable; and an artificial appetite for it is thus created, which increases, until it often results in the destruction of health and life.

In many families, it is common to have a bitters, as it is called, made of garlic, or herbs of some kind, good for worms, colic, or some other of the nameless diseases of which children are often only supposed to suffer; and these bitters are frequently drank by all in the house, parents, children, and domestics. These bitters are, for the most part, prepared with alcohol for a menstruum, and have made more drunkards in this country than perhaps all other causes combined. Witness the famous bitters of Dr. Thomson, of Albany, who boasts of having sold 30 barrels in a single year. These are made of Malaga wine, and are drank and recommended for the sake of the alcohol that is in them, by the lovers of rum as a medicine. See also Dr. Solomon's Balm of Gilead, by which he made a princely fortune, and Dr. Dyott's Cordial, which has

been little less successful. These, with all the tribe of stomachic bitters, cordials, elixirs, and medicamentums, are but devices founded upon the medical use of ardent spirits, and for the most part possess no active properties other than the alcohol imparts. So manifest had the ruinous effects of all this class of medicines become, as early as the days of the venerable Rush, that he banished them from his *materia medica*, and taught his students in the University of Pennsylvania, from his professorial chair, that all such medicines were pernicious to the health, as well as destructive to the morals of the community. And when his patients would ask permission to take his prescriptions in gin, or spirituous liquors of any kind, he would reply, "No man shall look me in the face in the day of judgment, and say Dr. Rush made me a drunkard." And he would often add, "If God will forgive me for making drunkards in the early part of my practice, when I knew no better, I will never make another." If his mantle had fallen upon his successors, happy would it have been for the nation and for the world.

But, alas! in the face of the ten thousand facts which this subject has presented, no prescription has been and is more common with very many physicians than a mixture of tonic bitters, to be mingled with gin, or some other form of intoxicating liquor. No marvel that dyspeptics should multiply on every hand, when such practice is pursued with almost every derangement of the digestive organs; nor is it any wonder that drunkenness should become so widespread an evil, when a large proportion of our adult

population are regularly dosed with alcoholic medicines.

Thus far I have not spoken of the stupidity of those who daily use brandy, gin, or any other form of spirits, with or without water, from any medical quality which these stimuli are supposed to possess. For, although they find that these liquors, taken alone, produce the same sensations of relief which they felt while using the medical bitters compounded with them, and have been thus taught to drink by using alcoholic medicines, yet these sensations are deceptive, and destructive to the stomach. Alcohol possesses no medical virtue whatever, which does or can compensate for the injury it does to the human system, if taken in repeated doses, or if those doses be larger than can be given by drops. It is on this principle, only, that the very large class of tinctures can be innocently retained in the *materia medica*. All these are alcoholic, but, like laudanum, are given in small doses of 10 or 20 drops, and this small quantity of alcohol produces no sensible effect. But all those tinctures, elixirs, essences, cordials, or bitters, which require to be given in larger doses than a teaspoonful, ought to be rejected from practice. And that they can be rejected without either injury or inconvenience, is shown by the fact that Dr. Rush laid them all aside for many years before his death, and that very many physicians of extensive practice in this country never use them under any circumstances.

The project, therefore, deemed by some as an Utopian one, of excluding alcohol entirely from the ma-

teria medica, is perfectly feasible, for every physician knows how to prepare the article used in the form of tincture in some other form; and I again repeat, that the alcohol, in all these, possesses no medical quality or virtue whatever.

To show, in a striking light, how one of the simplest forms of alcoholic medicine may prove a snare, and result in the destruction of our fellow beings, I here insert a narrative, from the Life of Dr. Adam Clarke, just published, of a circumstance with which he became personally acquainted, and one which has had many parallels in this country.

“A. B. and his wife C. B. were members of the Methodists’ society, in Portsmouth Common, and in decent and respectable circumstances. C. B. was frequently troubled with *indigestion*, and consequent *flatulencies*. A female neighbour said to C. B., ‘There is a very fine bottle which has done me much good, and I was just as you are; and I am sure it would do you much good also. Do try but one bottle of it.’ ‘What do you call it?’ ‘*Godfrey’s Cordial*.’ ‘Well, I will try it, in God’s name, for I am sadly troubled, and would give any thing for a cure, or even for ease.’ A bottle of this fine spirituous saccharine opiate was bought and taken *secundem artem*; and it acted as an *elegant dram*! ‘O dear, this is a very fine thing; it has done me good already; I shall never be without this in the house.’ A little disorder in the stomach called the bottle again into request: it acted as before, and got additional praises. By and by the husband himself got poorly with a pain in his stomach and bowels; the wife said, ‘Do, A., take a little of my

bottle, it will do you much good.' He took it ; but then, as he was a *man*, it must be a *stronger dose*. 'Well, C., this is a very fine thing, it has eased me much.' Though the wife was not cured, yet she was very much relieved ! So bottle after bottle was purchased, and taken in pretty quick succession. The husband found it necessary also to have frequent recourse to the same ; and now they could both bear a *double dose* : by and by it was *trebled* and *quadrupled* ; for former doses did not give relief as usual, but the *increased dose* did. No customers to the quack medicine venders were equal to A. B. and his wife. They had it at last by the *dozen*, if not by the *gross* ! Soon, *scores of pounds* were expended on this *carminative opiate*, till at last they had expended on it their *whole substance*. Even their furniture went by degrees, till at last they were reduced to absolute want, and were obliged to take refuge in the *poor house*. Here they were visited by some pious people of the society ; saw their error, deplored it, and sought God for pardon. A good report was brought of this miserable couple to the society : it was stated that they saw their folly, and were truly penitent ; and it was a pity to permit a couple, who in all human probability had much of life before them, to linger it out uselessly in a wretched work house. A collection was proposed for their relief among the principal friends ; it was productive, for a considerable sum was raised. They were brought out, placed in a decent little dwelling, and a proper assortment of goods purchased with the subscription already mentioned, and they were set up in a respectable little

shop. Many of the friends bound themselves to give A. B. and his wife their custom: they did so, and the capital was soon doubled, and they went on in religious and secular things very prosperously. Unfortunately, the wife thought her indigestion and flatulencies had returned, were returning, or would soon RETURN; and she once more thought of *Godfrey's Cordial* with *desire* and *terror*. 'I should have a bottle in the house: surely I have been so warned that I am not likely to make a bad use of it again.' 'C., I am afraid of it,' said the husband. 'My dear,' said she, 'we have now experience, and I hope we may both take what will do us good, and that only.' Not to be tedious, another bottle was bought, and another, and a dozen, and a *gross*; and in this they once more drank out all their property, and terminated their lives in Portsmouth Common work house!

"The reader may be astonished at this infatuation; but he may rest assured that the case is not uncommon: *Daffy's Elixir*, *Godfrey's Cordial*, and *Solomon's Balm of Gilead*, have in a similar manner impoverished, if not destroyed, thousands. On this very principle they are constructed. They are intended to meet the palate, and, under the specious name of *medicines*, they are actually used as *drams*; and in no few cases engenders the use of each other. Thus *drops* beget *drams*, and *drams* beget more *drops*; and they, *drams* in their turn, till health and property are both destroyed; and, I may add, the soul ruined by these truly infernal composts. It would, it is true, be easy to expose them; and it is difficult to refrain:—

*'Difficile est Satiram non scribere, nam quis iniquæ
Tam patiens urbis, tam ferreus, ut teneat se?'*

But who dares do this? The iniquity is *licensed* by the *state*: and government makes a gain by *taxation* of that which is destroying the lives and morals of the subjects!"

The experience of mankind having demonstrated, that the use of the class of alcoholic medicines denominated Tinctures, have produced such calamitous results; it is not to be wondered at; that the philanthropists who are now waging war against intemperance, should call upon the Faculty for protection from this subtle enemy, whose mischiefs have become so apparent. And the recommendation to substitute watery infusions, decoctions, or acetous tinctures, for those now in use which are prepared with alcohol, is neither unnatural nor unreasonable. If one in a thousand, or one in ten thousand, of those to whom we give these tinctures, thereby contract an appetite for their use, which results in the ruin of an individual by drunkenness, much less that of a family, it is an evil for which none of the specific virtues of alcoholic medicines can ever compensate, and one which ought to be annihilated if need be, by the utter extermination of all such preparations from our dispensaries and pharmacopœias.

But this direct mischievous result of alcoholic preparations is insignificant in comparison with the evil, considered in a different point of view. The *medical use* of ardent spirits is now the only use which enlightened or intelligent men can admit to be necessary or advantageous. Hence, in reply to every proposition of banishing the article from the land, it is strenuously urged, that it is highly important and

even indispensable as a medicine, and therefore its traffic and manufacture is defended and defensible. This idea of its being indispensable as a medicine is so universally prevalent, that the pledges of Temperance Societies are most generally conformed thereto, not because of any mental reservation in most cases, but to relieve tender and sensitive consciences. This is the origin of the phraseology of these several pledges, "except in case of sickness," necessity, or the like; or the language now used by the American Temperance Society, pledging against the traffic and use of ardent spirits "*as a drink.*" Now all these exceptions are so many saving clauses, founded on the implied idea that the medical use is indispensable, an idea which I fearlessly affirm is unfounded in fact.

I will not assume that a single draught of ardent spirits may not have been often useful in various diseases, nor that it has not frequently preserved from sudden death under some circumstances, when no more suitable agent was at hand. Indeed I will admit all that the advocates for rum as a medicine can claim for it, founded upon such instances, and yet I deny that it is ever indispensable. I can effect by other and innocent agents every thing in relieving disease, that can be effected with any form of ardent spirits; and every well educated physician knows, that our art has resources adequate to meet any possible emergency, if the art of distillation, with all its products, were annihilated forever. It is idle then to pretend, that the manufacture and traffic in ardent spirits must necessarily continue, because its medical use is indispensable. A case frequently

named, as illustrating the value of spirituous liquors, is that which is founded on the sudden deaths which are reported every summer as occurring from drinking cold water; and it is urged that a little brandy taken with the water, would prevent these casualties; and still farther, it has been found, that persons have been recovered from the alarming dangers produced by drinking cold water when heated, by quickly swallowing a draught of raw brandy. And hence it is argued, that in hot weather ardent spirits in the water drank is *useful*, and for the effects of drinking water alone ardent spirits are *indispensable*.

The argument however is unsound, and the illustration an unhappy one, if it be recollected, that the instances of sudden death from drinking cold water, almost universally occur among intemperate foreigners, or others who habitually indulge in the use of spirituous liquors. And after drinking as usual until a thirst is thus created which rum will not gratify, they go to a pump or spring of water, and drink to allay this thirst, which is more from their intemperance, than from labour and heat united. Such are most generally the facts in the instances referred to, as is well understood by those who have attended to the subject.

The effect of the cold thus suddenly applied to the stomach, is supposed to be a paralysis extending from that organ to the heart, and hence a powerful stimulus, promptly administered, is the usual remedy. For this purpose, opium, capsicum, camphor, ammonia, and the like, have all been successfully employed, and either are preferable to alcohol for this purpose,

especially when the patient often has half a pint of rum in his stomach at the time of the accident, as I have known to be the case more than once; and in such cases, it is somewhat unaccountable how the mixture of rum and water before drinking it, is to *prevent* the accident, and mixing it *in the stomach* is to *cure* it; but this may be regarded as another specimen of rum logic and alcoholic philosophy.

The truth is, that water, however cold, drank by an individual however much heated, never did produce this paralysis and death, except when the stomach had previously been impaired by intemperance or otherwise, and hence these accidents proverbially occur among drunkards. And it is equally true, that in these, when the effect of drinking cold water can be relieved, there are other remedies more immediate and effectual than alcohol, so that it is by no means indispensable even under such circumstances. Among the hundreds of thousands who practise total abstinence from all intoxicating drinks, there cannot be an instance produced of death from drinking cold water, although they usually drink it more frequently and more liberally when heated, than do the intemperate. They are perhaps for the most part more discreet than to use any thing to excess, and if they should even trespass in this respect, with cold water, the only evil effects that would follow, are a temporary disturbance of the system, neither dangerous nor fatal. The stomach unimpaired by artificial stimulation, has ordinarily vigour enough to reject the water or overcome the effects of its temperature.

The pretext for mixing alcohol with water, be-

cause of its bad quality, as is proverbial in New York, is alike unfounded, for there is no quality so bad in the water as this imparts to it; and certainly none, to which this is an antidote. And yet in this city there are many barrels of ardent spirits in its varied forms, which are medically used on this pretext, and then forsooth all the mischiefs of the rum are set down to our "villanous pump water." The bar keepers of our hotels, taverns, and other grog shops, find it their interest to cry down the water, and pronounce panegyrics on the virtues of mixing it, especially for strangers, who are earnestly cautioned against using pump water, without its being first made into punch, sling, or bitters. It is on this account that a single visit to our city, has been so often the ostensible cause of manufacturing drunkards, for persons have here learned to drink rum as a remedy for bad water so well, that on their return home, they could not unlearn it, and have never found any water since good enough to dispense with the addition, which they found so exhilarating and medicinal. I have often been amused at the willingness manifested to take this *medicine*, even by those who abhor physic in all its forms, and however sensitive or delicate the stomach in refusing castor oil and jalap, this kind of medicine seldom excites any nausea or disgust, and hence it is given to cover the taste of other drugs, until it has become an almost universal panacea.

But still another and greater evil results from this error, which is, that thousands of those who love rum, are daily drinking it as a medicine for the cure

of imaginary diseases, or for the relief of real maladies, which its use as a medicine is not only increasing, but has absolutely created. Indeed, scarcely any man, having pretensions to character, will publicly call for, or drink a single glass of spirits, without complaining of indisposition as his apology for drinking it as medicine. Hence the varied and even opposite excuses which are offered for drinking, such as *pain or sickness at the stomach, want of appetite, indigestion, chilliness, headache, inability to sleep, weariness, idleness, dry or wet, hot or cold weather, hard work, or nothing to do, soft or hard water*, and the like frivolous pretences; and in all such cases, it is taken, not *as a drink*, but *only as a medicine*. Thus, the habitual use of spirituous liquors in a vast proportion of the cases in which it is now drank, is the result of the medical use, by which men are taught that it is not only right to drink rum, but useful and necessary. And at this crisis in the onward march of the temperance reformation, it is plain that nearly all the drunkenness of the future generation might be prevented but for its medical use.

And here it may be appropriately remarked, that the opinion of the indispensable necessity for ardent spirits is fortified by another sentiment, which is as erroneous and absurd as any other of the vulgar errors we have been deprecating. It has been repeated ten thousand times, until it has grown into a proverb, that those persons who have daily and habitually accustomed themselves to drinking spirituous liquors, even if they desire to abandon the vice, and however many motives may justly impel them to

reformation, must not quit suddenly, but continue to drink it *as a medicine*, gradually and very cautiously reducing the quantity, little by little. Indeed, they are told that to quit drinking suddenly will endanger their health, and even destroy life itself; and marvellous instances are often related of drunkards who have abandoned their habits suddenly, and very soon perished for want of a little alcohol as a medicine. Such stories are fictitious universally, by whomsoever told; and yet, while they are believed and acted on, the drunkenness of the drunken will be perpetuated for ever, for the very obvious reason, that he who undertakes to quit drinking rum little by little will never quit at all. I have known hundreds of instances of reformations being attempted after this manner, and I never knew or heard of a successful one.

This false notion is most pernicious in the management of the disease peculiar to drunkards, called *mania à potu*, or *delirium tremens*, familiarly known by the name of "*horrors*." It is most generally attributed by the patient and his friends to the want of rum;—but is, in fact, the result of repeated excesses having overthrown both the brain and nervous system, and involved all the powers of life in a drunken phrenzy. The attack most generally exhibits itself after a "hard frolic," when the patient has been lying for hours in a stupor almost apoplectic. When he arouses from this lethargy he is delirious, begins to mutter, and exhibits marks of fright. He sees continually before him assassins and fiends who are come to torment him, struggles convulsively, and

often shrieks in agony, while a cold sweat is streaming from his body. From this state he often rouses to the rage and fury of a demoniac; and yet, in his lucid intervals, he will call aloud for rum, and utter the most horrid imprecations and blasphemy if it is withheld.

While in this shocking condition, so obviously induced by drinking ardent spirits, as shown in the fact that the array of symptoms peculiar to these "horrors" is never produced from any other cause, his friends often give him more of the poison which has so nearly destroyed him; and physicians are sometimes found, who adopt this vulgar and mischievous error, and pour down rum as a *medicine*; until the patient falls a victim to the destroyer; and even then sagely account for his death by deciding that he quit drinking too suddenly, or that his stomach would not receive any more of his infernal medicine, as it is frequently rejected by this organ under such circumstances.

Plausible and popular as is this practice, every man of sense in the profession knows full well that it is both cruel and absurd; and that it would be as rational to attempt to extinguish fire by piling on fuel, as to cure the disease arising from rum by giving more rum. The only difference is, that the *cause* of the disease was taking RUM *as a drink*; while its *cure* is found in taking RUM *as a medicine*;—a very important distinction truly, and one worthy of capitals and italics. In sober truth, however, this disease is incurable while its cause is persevered in; and the numerous deaths which are reported from *delirium*

tremens are most frequently the result of this medical use of some form of spirituous liquors, which is given on the false and absurd idea, that it is not safe suddenly to withhold the accustomed stimulus; for under judicious treatment this disease is seldom fatal, except after a frequent repetition of the attack.

If there were any danger from suddenly abandoning the use of rum, why is it not exhibited in the multitude of drunken vagrants who throng our penitentiary, and in the thousands of drunkards who crowd our State prisons? These all quit suddenly, and yet who ever heard of either health or life having suffered thereby? The notion is unworthy of sober refutation, and is only named because it is one of the hydra-headed sources of this medical use of alcohol.

On the physicians of this country, therefore, the hopes of posterity depend, and to them this cause of philanthropy and benevolence now imploringly appeals. If our profession will nobly espouse the cause of Temperance, by expelling from the practice of physic all alcoholic preparations of medicines; and unite their combined testimony in favour of the truth, that the medical use of ardent spirits can be wholly dispensed with, not only without detriment, but with incalculable advantage to the public health; then shall we acquit ourselves of the fearful amount of responsibility which is accumulating upon us for the propagation of this ruinous and fatal delusion, that the traffic and use of ardent spirits must be continued, because indispensable in medicine. Better for the health and lives of the community, that the very name and existence of the medical profession, should

be driven from the land or blotted out for ever, than that we should entail this stupid deception and mischievous imposition upon the nation and the world. For even the advocates for the medical use of rum must admit the obvious, though appalling truth, that more lives are lost by drinking rum *as a medicine* in a single year, than are preserved by it in a century.

The solitary instances of immediate relief in sudden and dangerous diseases, which have occurred from a single dose of ardent spirits, is no argument for the necessity of keeping it in the house in readiness for such an emergency. Who has not seen instances of the application of scalding water, and the actual cautery, to the skin, in sudden and dangerous conditions of the body, successful in preserving life? And yet no one proposes to keep a kettle perpetually boiling, or a *red hot iron* day and night in the house, that these agents may always be accessible. And yet the cures reported by the application of fire in desperate attacks of disease, are quite as numerous as any authenticated cases of similar character which have been cured by rum, and there would be as much propriety, therefore, in the timely provision of the one remedial agent as the other. The truth is, that this is the last and only hold which rum has upon the public mind, and on us devolves the tremendous responsibility of loosing its grasp, or bearing the reproach of its consequences.

If, however, physicians will not perform their duty from the paramount motives so calculated to impel them to it, the hopes of humanity need not thus be overthrown; for the mighty influence of truth will

gradually but certainly put them down by the force of public opinion. The true light on this, as on other subjects involving the physical and moral regeneration of the world, is now shining, and is destined to dispel the clouds of ignorance and imposture, which still linger upon the minds of men, even at the expense of the craft. Neither priest-craft nor the doctor-craft can longer bind the restless exertions of inquiry, and both the one and the other profession must yield their dogmatisms to the light of truth, and maintain their authority by a corresponding conformity to the genius of the age; or neither will be able any longer to control by the one, or maintain by the other; and they and their useful professions must succumb to the spirit of reformation which, in these respects, possesses the attribute of Omnipotence. I have no fear, however, that the medical profession, enlightened and liberal as it has become in this country, will be far behind the spirit of the age. So soon as the important bearing upon the temperance cause, which the medical use of ardent spirits is occasioning, is felt and appreciated, physicians will everywhere proscribe it from their practice. This being done, the public will begin to feel and act for the banishment of an article from the nation, which is productive of *no good in sickness or in health*; but the effects of which, upon individuals, families, and the community—upon the body and the soul, are “*evil, only evil, and that continually.*”

It is objected by some, that as laudanum, paregoric, and other tinctures, the nature and properties of which are now familiar to every family, are pre-

pared with alcohol as a menstruum; and as the resinous properties of gums will not yield to watery infusions, that it will be impossible to lay aside this large class of remedial means, called Tinctures. I have already intimated my own personal conviction that if alcoholic medicines were only used in these forms, and in doses not exceeding a few drops, the influence and effects would be imperceptible, and consequently no danger could be apprehended. But it is a melancholy fact, that some of these tinctures are used in the manufacture of drunkards to a fearful extent; and the examples of habitual intoxication, by taking increased and increasing doses of laudanum, paregoric, and the like, are so frequent as to admonish us of their pernicious tendency; and although in other cases, as in that of Godfrey's cordial, which has been mentioned, the effect is that of opium rather than alcohol, still the pleasurable exhilaration produced is of the same kind in both cases, because these narcotic poisons are analogous in their nature and effects. The use of rum, as a medicine creates a morbid appetite, not only for itself, but for opium and all other narcotic agents, and hence those who begin with ardent spirits, often end in some more mischievous medicine, if such a one can be found in the *materia medica*.

Nevertheless, the evils produced by retaining the whole of the tinctures, and persisting in their use, would be of small importance; and indeed they dwindle into insignificance, when compared with the medical use of the different forms of ardent spirits in various real or imaginary diseases. And yet it is ob-

jected to their abandonment, not merely that they have often been convenient and useful in sudden emergencies, but that their stimulating quality is useful in cases of general *debility*, from whatever cause; and many attribute to them a tonic and invigorating attribute, which in many constitutions is said to be innocent and salutary. In opposition, however, to this sentiment, we have the fact, that this world was peopled, some thousands of years, by a healthy, vigorous, and athletic population, before the art of distillation supplied them with this medicine; and the additional fact, that among the hundreds of thousands in our country who totally abstain, these tonic and invigorating effects of it are never called for. And beside, these facts, it cannot be denied, that their stimulating and exciting effects upon the stomach, and upon the general circulation, however closely resembling those of health, are unnatural and essentially different in character from the excitement accompanying a salutary state of the system.

But even if ardent spirits, used strictly as a medicine, were possessed of all these virtues, still I would contend for their entire relinquishment, if for no other reason, than that this medical use, while it continues to receive the sanction of the wise and good, gives origin and perpetuation to all the accumulating evils of intemperance. It can never be made generally disreputable, either to traffic in spirituous liquors, or to use them, while they are admitted to be drank daily and habitually as a medicine, either by those who are really sick, or fancy themselves to be so.

This will be evident, if we consider that a very

great majority of mankind are at all times in one of these conditions. By excessive eating, or other imprudences of living, more than half our adult population are complaining more than half the time ; and alcohol, in some form, as a medicine, is the remedy more frequently resorted to, than the physician, or the legitimate resources of his art. Indeed, for little ailments, as the first effects of excesses in living are called, the medical use of ardent spirits is almost universal for children as well as adults, and no other remedy is sought, while this affords a semblance of relief. Very soon the medicine itself, thus often repeated, produces symptoms of disease more serious than any for which it was prescribed, and yet the same medicine is relied on for its cure. Such is the only philosophy or logic which now sustains the whole fabric of alcoholic medicine.

Impressed with the importance of these views, I have resolved to throw them before the public, and hazard any criticism which they may occasion, either from members of my own profession, who may honestly entertain different sentiments, or from the advocates and apologists for rum, wherever they may be found. If I am correct in my opinions and reasoning, then the completion of the work of the Temperance reformation, in exterminating spirituous liquors from the nation and the world, may be looked for at a much earlier period than its most sanguine friends have anticipated. For I repeat my conviction, that if the medical use can be overthrown, the manufacture, traffic, and use, of alcohol, may be at once annihilated for ever. “ *Truth* is mighty, and

will prevail ;" however long or loudly *error* may plead for triumph.

If there can be found on the records of the healing art, or on the page of authentic history, the description of a disease with which the human body was ever afflicted, or a single symptom which ever presented itself, for which there is not a more safe and effectual remedy, than is any modification of alcohol ; I confess that in my diligent investigation of the subject for many years, and in all the opportunities I have enjoyed in public and private practice, I have never found any evidence of the fact, and am willing that any champion of ardent spirits may publish such a one to the world, as an *argumentum ad hominem* against all I have written. Nay, I will go farther, and add, that if any candid and enlightened physician will give a description of a *supposed* case of disease, which he may *fancy* as occurring within the limits of *probability*, whether the patient have previously been *sober or drunken*, and in which any form of ardent spirits is *indispensable*, I will give him credit for his ingenuity ; and, if I cannot refute his argument founded upon this supposition, I will magnanimously proclaim my error, and retract the affirmation of the utter worthlessness of the article, as a medicinal agent.

But, let it be remembered, that such a case, real or imaginary, must exist, and must be produced, or our profession will be inexcusable, if they any longer shelter beneath their authority and influence, this last *protégé* of the apologists and advocates for the manufacture, traffic, or use of the greatest evil with

which the world is cursed. Still, however, the last and strongest plea for the medical use of alcohol, is for its external use ; and which is urged by some with as much zeal, as though there was nothing in heaven above, or in earth beneath, which possessed the sovereign virtues of brandy, as an external application. Now it is passing strange, that physicians should be found, who sanction this vulgar supposition, and for various internal affections profess to have no other remedy than the outward application of fomentations of hot brandy : when there never has been any reason for its so general use, but the fact, that it is always accessible in almost every house, and therefore a convenient remedy at all times. Its effect upon the skin is that of direct stimulation ; which can be produced as effectually in any disease by vinegar, or capsicum, or mustard, or any other of the class of rubefacients ; and indeed these agents are very generally preferable for their curative properties. Nor is there any one of the multiplied ailments for which spirituous liquors are thus externally applied, for which there are not other and more useful remedies. This pretext, therefore, for the indispensable necessity of the continuance of the traffic and use of alcohol is therefore, like the rest, without foundation ; apart from the fact that too many use the same medicine outside and inside simultaneously. I have known many persons who drank intemperately, wash their heads with rum, that they might account for the presence of its vapour upon their persons, by having used it externally only as a medicine, to keep their hair from coming out.

Indeed, one of the most frequent applications of alcohol externally is to the head, under the name of Cologne, and other aromatic *waters*, as they are most improperly called; for they are all composed of rectified alcohol, and are universally mischievous to the hair, especially by reason of some of the essential oils with which they are perfumed; notwithstanding they are so fashionable, and so highly prized by the fairer part of creation. Their effect is not only that of burning the hair, but they often produce disease in the scalp, by which the roots of the hair suffer, and it falls out; a mischief which is often irreparable. This, therefore, which is the most fashionable medical use of alcohol, and in which an immense amount is consumed annually in this and other countries, is undoubtedly pernicious, and ought to be wholly abandoned.

I insist, therefore, that unless it can be demonstrated that alcohol is *necessary for some medical purpose*, its existence among us is, and its perpetuation will be, a more bitter inheritance for posterity, than Pandora's box received from Jupiter, with which to curse mankind; for that had *hope* at the bottom, while rum is without one solitary redeeming quality. Let those who oppose its banishment from the land, then, no longer plead for its *necessity*, or even for its *utility*; for neither are defensible by a single argument drawn from the resources of earth or heaven: but let them unblushingly avow, if they continue to plead for its perpetuation among us, and for bequeathing its withering curse upon future generations, that the *love of rum, and the love of its wages*,

are paramount with them to all the pauperism, crime, and unmingled wretchedness, it never fails to inflict in this life, and all the hopeless despair of the life that is to come.

Such are the stupendous motives which prompt the efforts of the friends of mankind, in their warfare against the demon intemperance, that it is amazing with what armour they can be resisted;—motives high as heaven, deep as hell, and immeasurable as eternity. All the bright and joyous hopes of mankind here and hereafter, must wither and die, unless this parent of abominations can be driven from the earth. And so long as disease in its variegated forms is the lot of humanity, and the art of healing continues to deserve and receive the homage of the world; so long must every *medicine* of real or supposed virtues continue to be held in veneration and esteem. The question, the momentous question, then, for this generation to solve is, whether ardent spirits possess this claim to immortality, or whether their medicinal virtues, if they have any, shall furnish a pretext for the perpetuation of their irreparable mischiefs to the bodies and the souls of men. I affirm the negative of this proposition, and with very many of my professional brethren, fearlessly proclaim, that the article may be safely and entirely exiled from the *Materia Medica* without diminishing our resources in “wrestling with death.” And whether we shall be successful in effecting this object, so soon as we deem it desirable or important, in this country, or not; there is every indication in the signs of the times, that our transatlantic brethren are aiming at this result; for since

the facts disclosed by the Cholera in every part of the earth, over which its march has been witnessed, many of the ablest physicians of England, and some in India, have strenuously urged the necessity of utterly proscribing its manufacture and traffic by legislative authority, and prohibiting its use among the people by penal enactments. And the proposition of abolishing alcohol from medicine, and removing all its compounds from the dispensatories, has found many advocates in England as well as in this country ; so that a "Temperance Pharmacopœia and Materia Medica," may ere long be introduced into both countries simultaneously, and the way is preparing by recent events so rapidly, that it will excite neither indignation nor surprise.

Still, however, physicians may abolish it from their catalogues of remedial means, and dispense with those compounds of which alcohol is the menstruum, and the medical use of ardent spirits will not then be annihilated. For justice to our profession requires it to be understood, that but a very small part of the medicinal use of alcohol is taken by our advice, but very much indeed is taken directly in opposition to that advice. In this department, more than any other, it may be said, that every man is his own doctor, for those who would not take a dose of salts or castor oil, without the best professional advice, will nevertheless not scruple to take brandy or gin *as a medicine* ; because, forsooth, it is so innocent that, with this kind of physic, they can prescribe for themselves ; and because, moreover, they need a repetition of the dose more frequently than it is convenient to see the doctor or economical to fee him.

And now, to the real friends of temperance scattered over the land, I would affectionately urge the importance of combining the influence of their example against the use of ardent spirits, not only "*as a drink*," but "*as a medicine*," for in this way only can the doctrine of "total abstinence" be consistently maintained, and in this way only can we hope for success in banishing the accursed thing from the country and the world.

I have said little about wine or beer, except under the generic name *alcohol*, of which these are the species. The one is the lion, the other are the whelps, and if the former is destroyed and declared by public sentiment to be neither good for food nor physic, the latter, and all the modifications of distilled and fermented liquors, will soon share the same fate. Already a wine-drinking, beer-tipping advocate for temperance, is becoming an offence in the public estimation, and the recent desperate effort made by professional men, as well as others, to elevate wine, and especially beer, as possessing medicinal qualities preventive of Cholera and the like, are beneath contempt, and only serve to show the dying struggles of alcoholic medicines for a name and place among men.

To my professional brethren I commend this whole subject as one worthy of their deliberation and energetic action. If they shall see this matter in the light in which it appears to my mind, and concur with me in the utter worthlessness as well as direful mischiefs of alcohol as a medicine, I call upon them to proclaim it by their united testimony and example. Such an effort on our part would secure the favour of the wise

and virtuous, which is the only popularity worthy either pursuit or possession.

Besides, I would urge the importance of the subject upon physicians from the fact, which it would be affectation to conceal, that too many of our profession have brought reproach upon the fraternity, and ruin on their reputation, by themselves falling victims to intemperance. Whether this be a just retribution on us for making so many drunkards among our patients, or whether it be the effect of the accursed habit in the families we visit, of offering us the decanter every time we enter their houses, it is not now my province to inquire. But I call upon my brethren who have escaped the pestilential influence of intemperance, to look around them and see how many great men have fallen; how many giant intellects are among us tottering to their fall; and how many learned and distinguished physicians are the known martyrs of inebriation. Humanity shudders, and the genius of our profession weeps over the unhappy, the melancholy truth, that some of those who once were an honour to our science, and ranked among our public benefactors, have, by ardent spirits, become prematurely superannuate; and we are compelled to bestow all our eulogy on the vigour of their youth, and become the encomiasts of their former achievements. Would to God their epitaph had been written while reputation and usefulness remained! but they linger among us only as so many beacons to warn us of the fearful vortex into which this vice has plunged the master-spirits of our age, once the ornaments of our profession, and our country's boast. It is enough to

cause a thrill of mortification and anguish through our hearts, and a curse on spirituous liquors to burst from our lips.

To those who live by the manufacture or traffic in spirituous liquors, I would earnestly and affectionately appeal, as the authors of a vast amount of physical and moral evil, and remind them that they are pursuing a business which, however profitable to them, is death both to the bodies and souls of their customers. It will be in vain to attempt a defence of their ill-gotten gains, by the stale pretence that a little is necessary, especially for the sick, if I have been successful in showing that it is worse than worthless even in medicine. And as this is the last prop on which they lean, whether I have removed it or not, it must fall: for alcohol is as certainly destined to be annihilated, as light and truth are destined to prevail over darkness and error. And in a very few years it is now morally certain, that the business of making and selling rum will be pursued, if at all, only by the profligate and abandoned.

And to my fellow-countrymen who have unhappily fallen into the snare of alcoholic medicine, and been taught to believe that it is harmless and useful; let me affectionately remind such, that to drink rum *as a medicine* is as certain and short a road to drunkenness as to take it *as a drink*; as proven in the fact, that nearly all the intemperance which disgraces our country began with taking a little, and only as a medicine. Beware, then, how you consent to enter this gate of the road to ruin, for even if you find temporary relief when you first begin the use of tinc-

tures, cordials, elixirs, or bitters, you will presently discover, when too late, that the medicine has produced other symptoms, more serious and irreparable than those for which you commenced taking it, and a gnawing worm will be found within you, whose cravings nothing but this same medicine will satisfy. "Better far to bear the ills you suffer, than fly to those you know not of." And if already you have begun to prove the mischiefs of alcohol as a medicine, and find within you evidence of the mischiefs I have faintly described, abandon it at once, however long continued has been the habit, for no mischiefs resulting from the sudden change, can equal the destruction which will assuredly follow its continuance.

Finally, what I have written is the result of no new and sudden impulse, but my opinion here expressed, is the sober conviction of my best judgment, confirmed by close and diligent attention to this whole subject, for a number of years. It is a truth fully established in my estimation, that alcohol in no form is either necessary or useful in medicine; and my convictions that it is invariably mischievous and often fatal, are so strong, that I have thus hazarded my small share of professional reputation on their publication. Of the ultimate result I have no fears, however severe the ordeal through which my strictures may pass, or however mighty the opposition which the innovation on popular opinion may encounter. I therefore submit the whole to my profession and the public; and even although I stood alone, which is far from being the fact, in my opinions of the worthlessness and wickedness of alcoho-

lic medicine, so clear is my persuasion of duty, that I would still hazard its performance, and cheerfully abide the issue. But I am well fortified by the knowledge, that many who have earned the proud distinction of being ranked among medical philosophers, and among the benefactors of mankind, are with me in sentiment, and, what is better, in practice. With these in such a cause, I rejoice to be identified; and if I forfeit the favour of some of my professional brethren, or meet the frown of any whose friendship I have been taught to value; I shall still deem self an insignificant sacrifice, in a cause so important to the present and future well-being of my fellow men, for, "*Homo sum; humani nil a me alienum puto.*"

I cannot, therefore, withhold the expression of the opinion, that the true interests of the public health will be every way promoted, by the utter abolition of the medical use of all spirituous liquors, whether externally or internally applied; believing, as I do, that they are *never* indispensable, *very seldom* useful, and *most generally* mischievous, both in sickness and in health. And if this object can be attained by enlightening public opinion the manufacture and traffic of the article will cease to be reputable, and none but those who are reckless of responsibility for the physical as well as moral evils which ardent spirits carry in their train, will any longer sell or use them. Then, and not till then, will drunkenness cease, for while respectable men continue the traffic, and are countenanced by the community, so long other respectable men will use it, if not *as a drink*,

they will as a *medicine*, and drunkenness will thus be perpetuated to the latest generation. But on the contrary, if every pretext for its utility and necessity be swept away by the power of truth, with the other "refuges of lies" which have so long deluded and defeated the best hopes of humanity ; it will then be no longer reputable to live by the gain made by poisoning our neighbours. And so soon as the traffic is thus branded with infamy, it will become disgraceful to drink it ; and pride, if no better motive, will put an end to drunkenness in the nation and in the world.

To hasten or retard this consummation, is a responsibility which after all must rest with our state and municipal authorities. The distinguished citizens filling the high stations of Commissioners of Excise, Aldermen, and other corporation offices, are by public sentiment estimated as honourable men. And as they perform their functions under the sanctity of an oath, if under such circumstances they continue to license indiscriminately, or if they sacrifice the public weal, by multiplying the authority to sell, beyond the real or pretended wants of the people, as is most generally done—it will be impossible to bring into disrepute the business which they by their official and solemn acts declare to be reputable ; nor can the traffic or use of ardent spirits ever be brought under the ban of public reprobation, while they throw about it the protection of their dignified legislation.

To these, then, must the friends of humanity look for the exercise of their high prerogatives, in limiting and gradually diminishing the number of licen-

ses; and as they must see clearly in the light of facts which are now public property, that the manufacture and traffic of ardent spirits is an evil; if they will continue to regard it as a *necessary evil*, they should at least aim to proportion the *evil* to the *necessity* for its existence. Can this necessity for licensing dealers in ardent spirits be greater, now that one tenth of our population practise total abstinence than it formerly was, when their use was nearly universal? Why then are the number of these licenses, increasing annually in almost every place? Is it true that the remaining nine tenths actually need more facilities to procure this poison, than the whole community did before? Or is it true that there is more rum now used *as a medicine* than was formerly consumed *as a drink*? These are grave and serious questions, which such public functionaries should solve for their own guidance, since on them rests the responsibility of upholding or banishing intemperance and all its kindred evils from the land.

My object has been to show that the sale and use of ardent spirits, if a necessary evil, are not *necessary* for *medical* purposes. If the evil is necessary at all then, it must be *as a drink*, and who is prepared at this late period to avow this opinion, even among those who license it, who make it, who sell it, or who drink it? The fact is, that rum, in no one of its forms, is *necessary*, unless it be to the work of filling alms-houses, penitentiaries, state-prisons, and graveyards! If necessary, it must be for that accursed *revenue*, the price of pauperism, crime, and blood! If necessary, I say again, it must be for filling the land

with unutterable wretchedness, and peopling hell with myriads who might else escape the withering curse of Him who has said, "No drunkard shall inherit the kingdom of God."

Away then with this vile plea of *necessity*, as a pretext for making widows and orphans by thousands, and inflicting upon thirty thousand of "our fellow citizens annually, the death of a fool and the burial of an ass." And let the public voice unite in declaring by precept and example, that all intoxicating liquors are *neither necessary nor useful* "as a drink or as a medicine," and are "henceforth good for nothing, but to be cast out and trodden under foot of men."

